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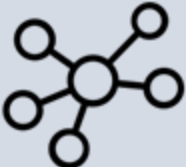




**SIR JONATHAN NORTH**  
**GIRLS' COLLEGE**  
Lionheart Educational Trust

# Knowledge Organiser Booklet

Year 9  
Autumn Term

# Ways to use your knowledge organiser

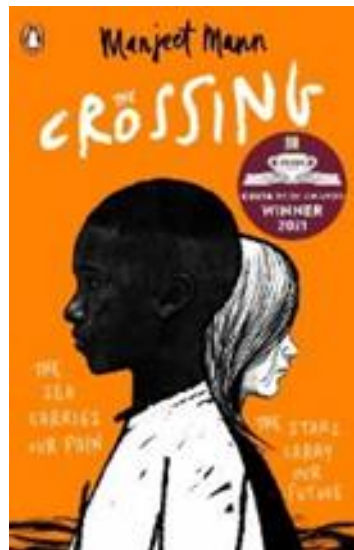
	Look, Cover, Write, Check	Self Quizzing	Mind Maps	Paired Retrieval	Definitions to Key Words
Step 1	<p>Look at and study a specific area of your knowledge organizer.</p> 	<p>Use your knowledge organizer to create a mini quiz. Write down questions using your knowledge organizer.</p> 	<p>Create a mind map with information from your knowledge organiser.</p> 	<p>Like self quizzing, use your knowledge organizer to create a quiz.</p> 	<p>Write down the key words and definitions.</p> 
Step 2	<p>Cover or flip the knowledge organizer over and write down everything you remember.</p> 	<p>Cover or flip the knowledge organizer over and answer the questions and remember to use full sentences and key words/vocabulary.</p> 	<p>Add pictures to represent different facts, knowledge. Try to categorise different areas in different colours.</p> 	<p>Ask a family member to ask you the questions and tell you which ones you get right and which ones you get wrong.</p> 	<p>Try not to use your knowledge organiser to help you.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Check your answers. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Try to make connections that link information together.</p> 	<p>Following the quiz, summarise which areas you got wrong and need to revise further.</p> 	<p>Use a different coloured pen to check you work and correct any mistakes you may have made.</p> 

# Lionheart Literary Canon: Curating a Lifelong Love of Literature

Recommended books to have read by the end of Year 9



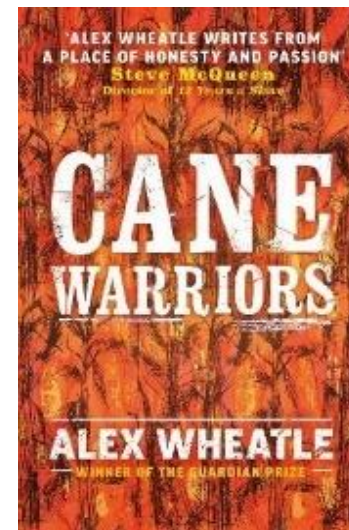
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**The Crossing**  
Manjeet Mann



**Black and British**  
David Olusoga



**Cane Warriors**  
Alex Wheatle



**Pet**  
Akwaeke Emezi

All books can be purchased online, or loaned from our library

The study of narratology is the study of the choices a writer has made about how they tell their stories. Aspects of Narrative translates as ‘ways of telling a story.’ Significance is about what is signified, what meanings arise in terms of values and ideas and how these meanings are produced by what writers do and the methods they use.

Narrative Voice	Genre	Structure	Setting
First person – introspective, extradiegetic or intradiegetic? Third person – focalised, authorial or narrator? Tense – retrospective (past tense) or present tense immediate? Multiperspectivity – a story told from many points of view Reliable or unreliable (bias)? Omniscient (all knowing) or inadequate (doesn’t know the whole story)? Who? Known/unknown? A character?	<u>R</u> omantic or pastoral – ideal images of the natural world romance – associated with romantic love Gothic – creation of darkness and fear Realism – portrays the real world with all its flaws Comedy – intention to make people laugh Tragedy – solemn and mournful tone Crime - deals with crimes, their detection, criminals, and their motives. Thriller – readers feel heightened feelings of suspense, excitement, surprise, anticipation and anxiety.	Chronological or fragmented? Complete or with narrative gaps? Openings and endings? Climatic moments? Anti-climaxes? Narrative frame? Media-res opening? Flashbacks or flash-forwards? Resolution or narrative-hook? Deus ex Machina? (ends tied up or ends on a Q) Order of events within the plot Change of narrators or use of dialogue or just description?	Wider setting – (country, city community) Place – precisely where? House, room, seat? Time – specified?, unstated, present day, past, present? Historically/geographically accurate or entirely fictional? Setting change - from where to where? Use of specific languages or place-specific references Use of place names

#### What not to do with narrative method and useful sentence frames

When discussing narrative method it is important to avoid feature spotting. Instead evaluate the impact of the writers choice.

#### Useful sentence frames

The introduction of the new setting at this point in the narrative allows the writer to show that the character has evolved because...

The gap in the narrative allows the writer to create a sense of confusion and means the reader is unsure who is the victim and who the villain because...

The shift into using typically Romantic generic conventions allows the writer to comment on the importance of the natural world when...

By employing a focalised narrator the writer allows the reader access to the character’s unspoken thoughts meaning pity is created when...

#### How to access “significance” in your analysis

You could consider an extract’s significance in terms of the plot – what has happened earlier to instigate these events? What happens later as a result of these events?

You could consider what messages are being endorsed? Are any characters or ideas being given preferential treatment or being side-lined?

You could reference any cultural, moral or social contexts that are being endorsed by the book.

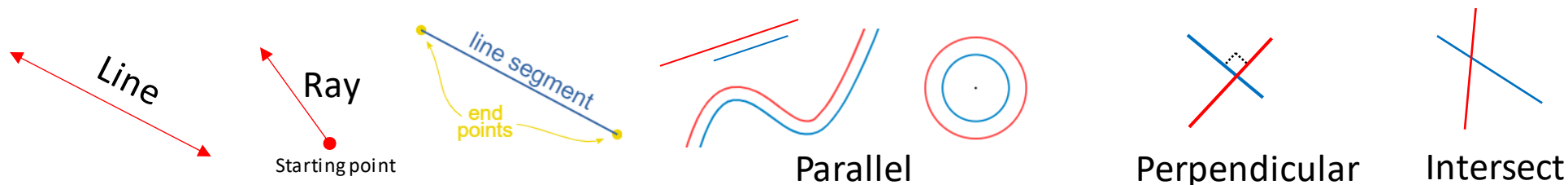
You could consider authorial intent or approval – is the writer advocating any specific ideologies?

You could consider whether a text fits into a traditional genre or whether it borrow from a few and what the effect of that is on the meaning

## Year 9 Aspects of Narrative – Djinn Patrol

superstitious	inequality	authentic	prestigious
persistent	intimidation	depiction	poignant
disadvantaged	concealment	ascertained	instinctive
urban	Incorporeal	unnerving	malevolent
influential	naive	insinuate	perpetuates
exploitation	exclusion	impulsive	accountability
basti	possession	inglorious	foreboding
Dickensian	minority	inevitable	culpability
dislocated	intuition	powerlessness	pessimistic

<b>Line</b>	Is straight entity that has no thickness and extends in both directions without end (infinitely).
<b>Line segment</b>	A line with two ends
<b>Ray</b>	A part of a line with a start point but no end point (it goes to infinity)
<b>Parallel</b>	Lines, curves, surfaces that are always the same distance apart and will never meet. The lines do not need to be the same length.
<b>Perpendicular</b>	A line that is at right angles to another line.
<b>Intersect</b>	To cut a line, curve or surface with another.

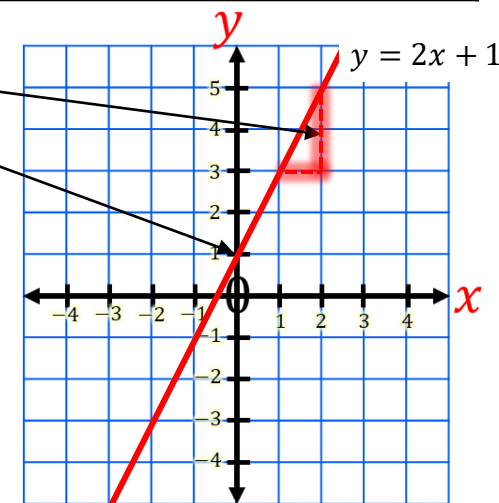


<b>Graph</b>	A diagram showing the relationship between (two) variables
<b>Midpoint</b>	The midpoint is halfway between the two end points of a <b>line segment</b>

<b>Gradient</b>	The steepness of the line. Change in $y$ for every one increase in $x$
<b>Y - Intercept</b>	Where the graph crosses the Y-axis

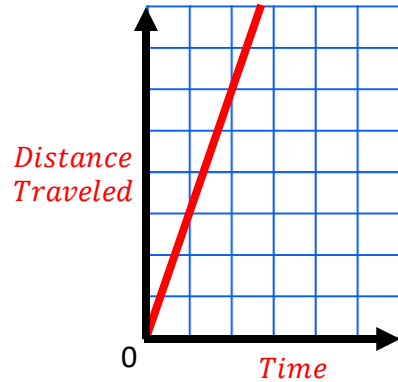
$$y = 2x + 1$$

↑ Gradient      | y-intercept



<b>Direct Proportion</b>	The relationship between two variables where the scale factor between them is constant.
<b>Inverse Proportion</b>	The relationship between two variables where the product of the variables is constant.

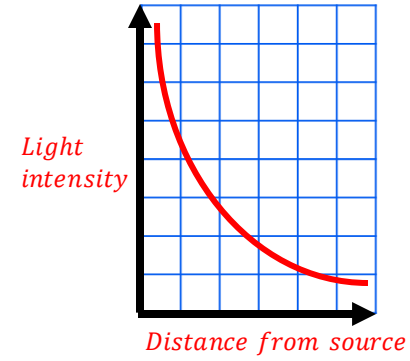
Direct Proportion



$Distance\ (miles) = 3 \times Time\ (hours)$



Inverse Proportion



$Light\ intensity = 3 \div Distance\ from\ source$



<b>Standard Index Form</b>	A form where a number is expressed as a multiplication of a number between 1 to 10 by a power of 10. $A \times 10^n$ where $1 \leq A < 10$ and $n$ is an integer.
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$3.04 \times 10^5 = \underline{304,000}$

$3.04 \times 10^{-5} = \underline{0.0000304}$

**KNOWLEDGE**

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Cyber Security Key Terms	
Brute Force attack	A form of attack that makes multiple attempts to discover something (such as a password).
The Computer Misuse Act	A UK Law makes accessing a computer system without permission illegal.
The Data Protection Act	A UK Law that gives you the right to access the data an organisation stores on you.
DDoS attack	When multiple computers flood a network server with internet traffic in order to disrupt a service.
Hacking	Gaining unauthorised access to or control of a computer system.
Malware	Software that is designed to gain access to your computer with malicious intent.
Penetration testers	People who are paid legally to hack into computer systems with the sole purpose of helping a company identify weaknesses in their system.
Personal Information	Information that is used to describe or recognise a person (e.g. name, date of birth, address etc.)
Social Engineering	Methods used by cybercriminals to deceive individuals into handing over information.
Protecting yourself	
Firewalls	Checks incoming and outgoing network traffic.
Anti-Malware	Software that scans any file that is able to execute code. If something is at risk it is quarantined.
Auto-updates	Auto-updates refers to software that automatically checks for available updates for the software you have on your computer.
User authentication	Measures taken to keeping your data and information safe: passwords, biometrics, CAPTCHA, two-factor authentication etc.
User permissions	Ensuring information is only available to people that need it.

Malware	
Viruses	Malicious software that self-replicates.
Worms	Worms replicate themselves but do not attach themselves to files as a virus would.
Ransomware	Locks a computer, encrypts files, and therefore prevents the user from being able to access the data. The attacker demands that a ransom is paid.
Trojans	Software that appears to perform a useful function but unbeknown to the user it also performs malicious actions.
Spyware	Unwanted software that monitors and gathers information on a person and how they use their computer.
Adware	Can be a worm, virus, or Trojan. It infects a computer and causes it to download or display malicious adverts or pop-ups when the victim is online.

Methods of Social Engineering	
Shouldering	Involves the attacker watching the victim while they provide sensitive information (e.g. over their shoulder).
Name generator attacks	The victim could be asked to provide a few pieces of information in an app to complete a short quiz or produce a name. Attackers do this to find out key information that can help answer security questions.
Phishing	The victim receives an email disguised to look as if it has come from a reputable source in order to trick them into giving up valuable data.
Blagging	An attack in which the perpetrator invents a scenario in order to convince the victim to give them data or money.





# KS3 – Representations: Going audio-visual

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### Overall Key terms

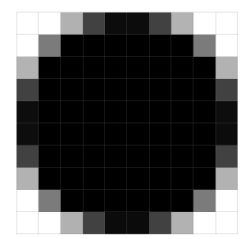
Bit	Small unit of data within a computer system (e.g. 0 or 1)
Binary digit	A base 2 number system made up of bits.
Machine code	A language that a CPU is able to process.

### Images

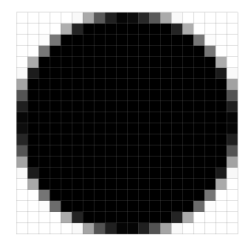
Pixels	A picture element filled with colour.
Resolution	The number of pixels in a digital image.
Colour depth	The number of binary digits used to represent each pixel's colour.
Raster graphics	An image made up of pixels.
RGB Colour	The quantity of red, green and blue used to create a colour.
Representation size	resolution x colour depth

### Sound

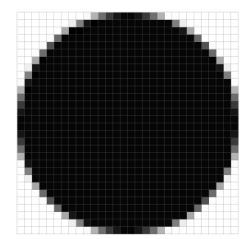
Sample	Taking a regular measurement from sound so you can digitise it.
Sampling rate	The number of samples taken per second.
Sample size	The number of bits recorded per sample.
Representation size	Sampling rate x sample size x duration x channel



1x  
(10 x 10 px)



2x  
(20 x 20 px)



3x  
(30 x 30 px)

### High resolution

Advantages	Disadvantages
Increased quality	Increased representation size
Increased capability to capture detail	More space required for storage
	More effort required for processing
	More time required for transmission
	resolution x colour depth

### High Colour Depth

Advantages	Disadvantages
Increased quality	Increased representation size
More colours available	More space required for storage
	More effort required for processing
	More time required for transmission
	resolution x colour depth

### High Sampling Rate

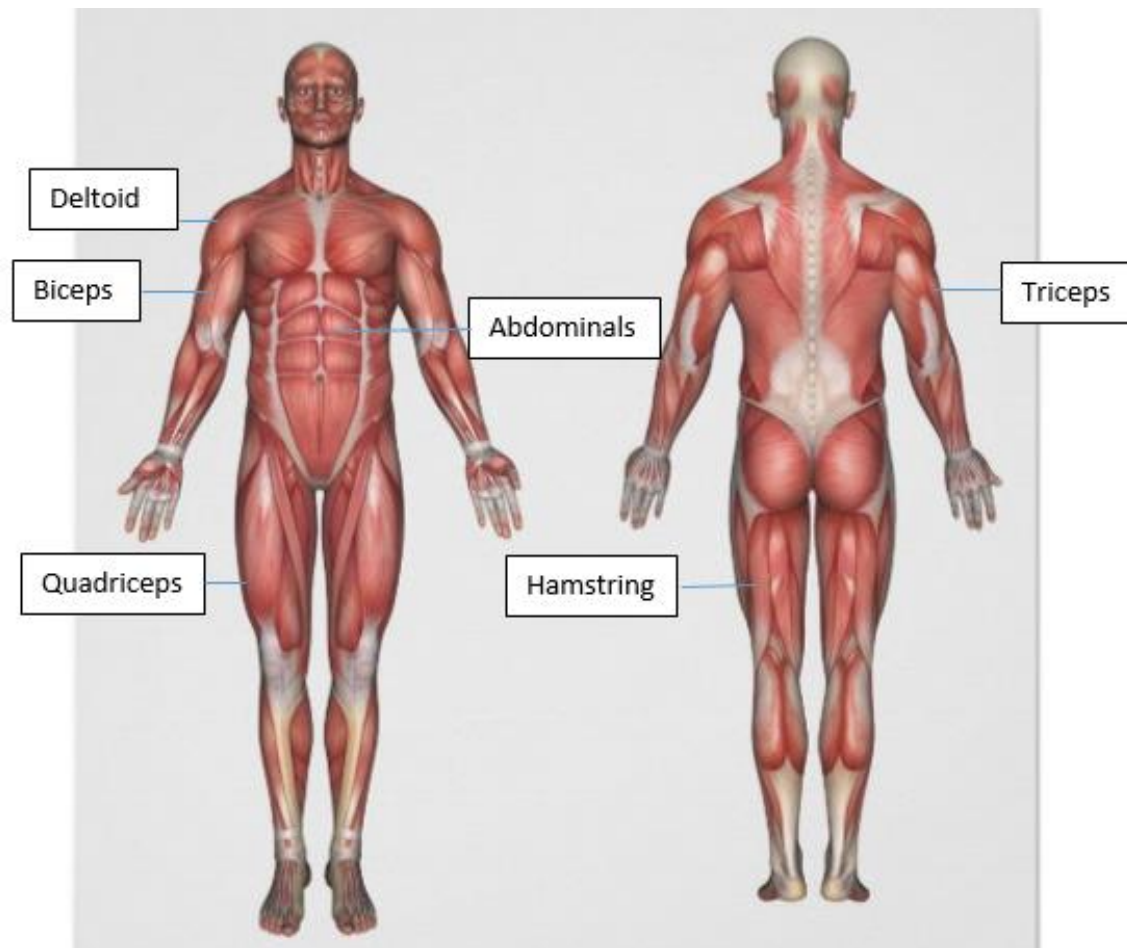
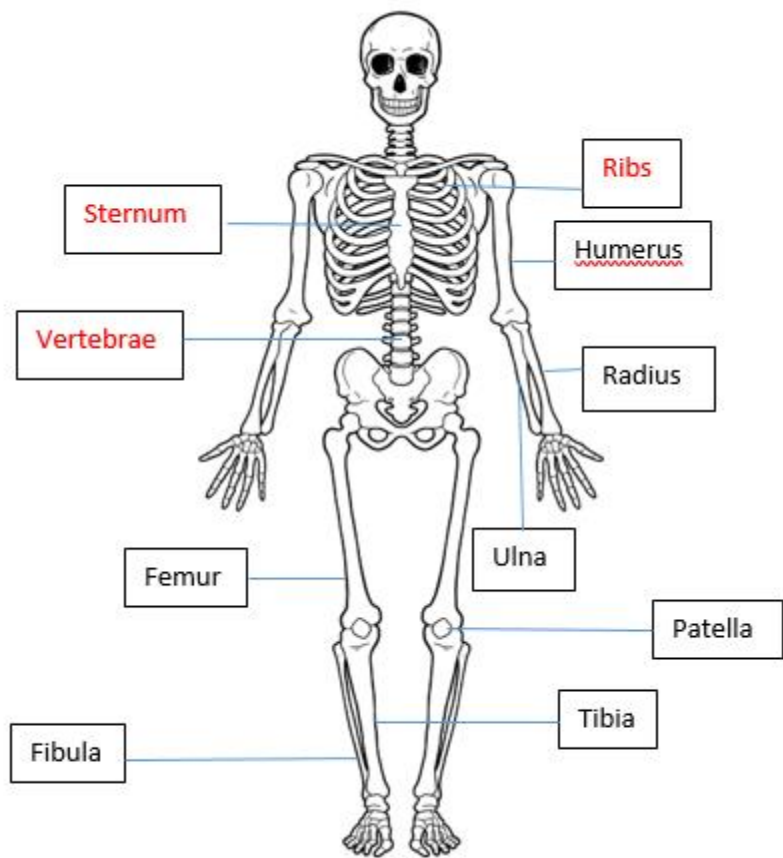
Advantages	Disadvantages
Increased quality	Increased representation size
Increased ability to accurately represent the original sound.	More space required for storage
	More effort required for processing
	More time required for transmission
	resolution x colour depth

## Unit 1 Physical Education- Knowledge Organiser: Staying safe in Physical Activity

Key learning content	Description / Explanation/ Example
<b>Stages of a warm up</b> <ul style="list-style-type: none"> <li>Stage 1 – pulse raiser (5 mins)</li> <li>Stage 2 – mobility exercises</li> <li>Stage 3 – stretching (10s+)</li> <li>Stage 4 – dynamic movement</li> <li>Stage 5 – skills practice</li> <li>Names of muscles</li> </ul>	<b>Examples of warm up</b> <ul style="list-style-type: none"> <li>Stage 1 – (Low intensity exercise) A 5 minute jog around a netball court.</li> <li>Stage 2 – (To a move a joint through its full range of motion) Arm circles, ankle circles, hip circles.</li> <li>Stage 3 – (Static or dynamic stretches) quadriceps stretch.</li> <li>Stage 4 – (high intensity exercise) Shuttle runs</li> <li>Stage 5 – (Practice the skills you will be using) Chest/ shoulder passes (netball)</li> <li>Names of muscles: quadriceps, hamstrings, biceps, triceps</li> </ul>
<b>Benefits of a warm up</b> <ul style="list-style-type: none"> <li>Increase temperature and HR</li> <li>Decreased chance of injury</li> <li>Increased oxygen transport</li> <li>Increased flexibility</li> <li>Increased speed/ strength of muscle contractions</li> <li>Mental preparation</li> </ul>	<b>Benefits explained</b> <ul style="list-style-type: none"> <li>Allow more oxygen to reach muscles</li> <li>Better for overall health. Can maintain involvement in physical activity.</li> <li>More oxygen gets to muscles, so can create more energy.</li> <li>Increased flexibility can enhance performance (Reach higher to catch a ball)</li> <li>Faster/ stronger movements - perform skills more effectively.</li> <li>Mental preparation – feel more alert/ focussed/ confident/ concentrating/ motivated/ relaxed etc.</li> </ul>
<b>Stages of a cool down</b> <ul style="list-style-type: none"> <li>Stage 1 – Low intensity exercise</li> <li>Stage 2 – Stretching</li> <li>Names of movements – flexion and extension</li> </ul>	<b>Examples of cool down</b> <ul style="list-style-type: none"> <li>Stage 1 – Steady jog on netball court, can move onto a walk</li> <li>Stage 2 – (Static stretches) Quadriceps stretch, hamstring stretch.</li> <li>Flexion = bending at an elbow or knee. Extension = straightening at an elbow or knee</li> </ul>
<b>Benefits of cool down</b> <ul style="list-style-type: none"> <li>Gradually lower heart rate</li> <li>Gradually lower breathing rate and temperature.</li> <li>Speeds up removal of waste products.</li> <li>Speeds up recovery</li> <li>Names of joints</li> </ul>	<b>Benefits explained</b> <ul style="list-style-type: none"> <li>Gradually lower heart rate from 150bpm when working to 70bpm when resting.</li> <li>To maintain blood flow/ oxygen transport/ carbon dioxide removal</li> <li>Carbon dioxide and lactic acid removed faster. Reduces aching, recovery is faster.</li> <li>Joints: Elbow and knee = hinge. Shoulder and hip = ball and socket</li> </ul>
<b>Preparing for physical activity</b> <ul style="list-style-type: none"> <li>Wear appropriate PE kit</li> <li>Long hair tied back</li> <li>Jewellery removed</li> <li>No chewing gum or food</li> <li>Water for hot weather</li> </ul>	<b>Preparation explained</b> <ul style="list-style-type: none"> <li>Sports trainers, shorts, t-shirt to avoid injury yourself or others.</li> <li>So you can see when playing</li> <li>Earrings taken out, bracelets off to avoid injuring yourself or others.</li> <li>To avoid choking when active.</li> <li>To stay hydrated /avoid headaches/ feeling weak</li> </ul>
<b>Risks and hazards to check for</b> <ul style="list-style-type: none"> <li>Area free from rubbish</li> <li>Equipment tidied away</li> <li>Equipment undamaged</li> <li>Surface dry/ undamaged</li> </ul>	<b>Hazards explained</b> <ul style="list-style-type: none"> <li>Check there is no debris such as broken glass on football pitch, to avoid someone injuring themselves.</li> <li>Check there are no equipment such as bibs left out on a basketball court from a previous activity, to avoid someone slipping/ tripping over when warming up.</li> <li>Check the trampoline is up properly, to avoid injury to a player.</li> <li>Check there is no water spilled on the badminton court, to avoid a player slipping and hurting an arm.</li> </ul>

## Year 9: Physical Activity- Key terminology

Key word	Description
Aerobic	Use of oxygen for the duration of the exercise. Usually at moderate intensity at a continuous rate e.g. long distance running. Can be performed for a long period of time.
Anaerobic	Exercise which creates energy without the use of oxygen. Usually high or very high intensity for a short period of time. E.g. sprinting up a hill.
Flexibility	Range of movement available around a joint.
Mobility	The ability to move freely.
Dynamic movement	Movements performed at high speed/ intensity.
Oxygen	The gas we breathe in, transport and use to create energy.
Oxygen transport	Oxygen is transported through blood vessels within the red blood cells.
Gaseous exchange	The movement of oxygen and carbon dioxide within the lungs, muscles and vital organs.
Contraction	A muscle contracts and (usually) gets shorter to apply a force and create movement.
Heart rate	Number of heart beats per minute.
DOMS	Delayed Onset Muscle Soreness. Usually occurs 1 or 2 days after high intensity exercise.
Lactic acid	A waste product produced in the muscle tissues during anaerobic exercise.
Waste products	Bi-products of aerobic exercise are carbon dioxide and water. Lactic acid is also a bi-product of anaerobic exercise.
Carbon dioxide	We produce carbon dioxide as a waste product. We transport it back to the lungs and breathe it out.
Recovery process	Returning the body to resting levels.
Intensity	How hard you work.
Team work	Working together to achieve a common goal. Requires good communication skills.
Reciprocity	Working positively with others as a group.
Demonstration	Showing someone how something should be done.
Communication	Transferring information by speaking, writing, demonstrating and using body language.
Risk	The chance or probability that someone will be harmed.
Hazard	A source of potential danger.
Injury	Damage or harm to the body.
Sprain	Damage to a ligament.
Mental Preparation	Getting your mind ready for competition through visualising the skills and imagining yourself being successful.



	<b>Description/ Location/ Role</b>
Muscle pair	Muscles that work together to produce a movement. Also called antagonistic pairs.
Hamstrings	A group of muscles located at the back of your thigh. Muscle pair with quadriceps
Quadriceps	A group of muscles located at the front of the thigh. Muscle pair with hamstrings
Biceps	A muscle located at the front of your upper arm.
Triceps	A muscle located at the back of your upper arm.
Abdominals	A group of muscles at the front of your body between the ribs and pelvis.
Deltoids	A group of muscles located at the shoulder.
Femur	A bone in your thigh
Tibia	A bone in your lower leg on the inside
Fibula	A bone in your lower leg on the outside
Patella	A small bone at the front of your knee
Humerus	A bone in your upper arm
Ulna	One of 2 bones in your forearm. The ulna runs down to your little finger
Radius	One of 2 bones in your forearm. The radius runs down to your thumb.
Ribs	Lots of bones in the chest protecting your lungs.
Vertebrae	Lots of bones in your back, sometimes referred to as your spine.
Sternum	Bone down the front of your chest protecting your heart.
Flexion	Bending a joint. This occurs when the angle of a joint decreases. For example, the elbow flexes when performing a biceps curl.
Extension	Straightening a joint. This occurs when the angle of a joint increases, for example, at the elbow when putting a shot.
Contraction	When a muscle produces a force which pulls on a bone.
Agonist	The name given to a muscle which is contracting and causing a movement/ producing a force.
Antagonist	The name given to a muscle which is relaxing while it's paired muscle contracts to perform an action.
Hinge Joint	These include the elbow and knee. They allow flexion and extension to occur.
Ball and Socket Joint	These include the shoulder and hip and allow flexion, extension, abduction, adduction, rotation and circumduction.
Abduction	Movement away from the midline of the body. This occurs at the hip and shoulder joints during a star jump.
Adduction	Movement towards the midline of the body. This occurs at the hip and shoulder, returning the arms and legs back to the centre from a star jump position.
Circumduction	This occurs at the shoulder and hip and involved the arm or leg moving in a circle.
Rotation	This is where the arm or leg moves in a twisting movement around the shoulder or hip. E.g. twisting foot to side to pass a football.
Concentric	A type of muscle contraction where the muscle shortens while it is contracting. E.g. biceps when lifting a weight.



# KNOWLEDGE ORGANISER

## CHEMISTRY: Advanced Chemical

Name: \_\_\_\_\_

### Reactions

#### Vocabulary

**Chemical Reaction:** Transfer of energy between reacting substances and the surroundings.

**Reactants:** Starting substances in a reaction.

**Products:** Substances that are made at the end of a reaction.

**Fuel:** A substance that can store energy and can release it when burnt.

**Combustion:** The process of burning.

**Thermal Decomposition:** A process in which a single substance is broken down on heating into smaller compounds /elements.

**Exothermic:** Energy transferred to the surroundings.

**Endothermic:** Energy transferred from the surroundings.

**Conservation of mass:** The total mass of the products in a chemical reaction will be the same as the total mass of the reactants as no mass is lost or gained

#### Types of Reaction

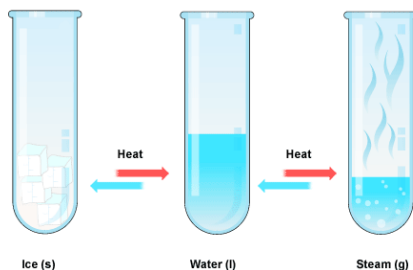
**Chemical Reactions:** atoms are rearranged to create a new substance. These reactions are NOT easily reversed.

**Physical Reactions:** no new substance is made but there is a change in appearance of a chemical. These reactions are easily reversed.

#### Signs of physical and chemical reactions:

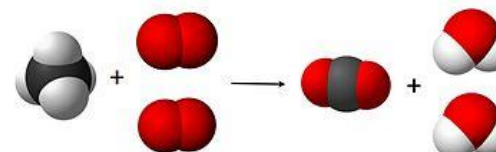
Physical	Chemical
<ul style="list-style-type: none"> <li>Solid dissolving</li> <li>Change in state</li> </ul>	<ul style="list-style-type: none"> <li>Change in appearance (colour)</li> <li>Change in energy (temperature, sound ect.)</li> </ul>

**Physical Change:** Dissolving or state change



e.g. Change in state of water

**Chemical Change:** forming a new substance



e.g. Combustion of Methane (Natural Gas)

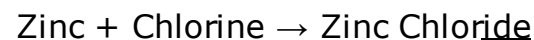
#### Word Equations:

**Reactants → Products**

A chemical equation tells you which chemicals reacted together (the **reactants**) and the new chemicals that were made in the reaction (the **products**).

The simplest equation is a word equation.

For example:



#### Combustion:



**Fire Triangle**

**Fuel :** A material that can be burnt to release energy by heating.

EG. Glucose, Methane , Petrol

**Combustion:** Is another name for burning. It is where a fuel is burnt in oxygen and heat to release energy.

#### Testing for combustion

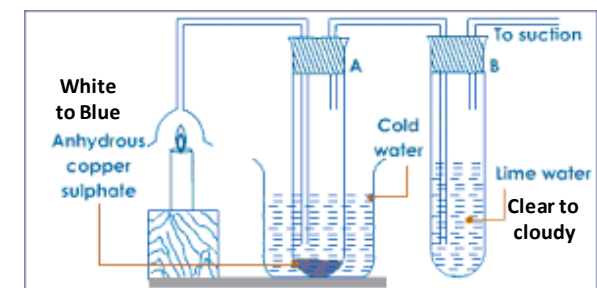


Fig. 5.9 To prove that water and carbon dioxide are formed when a candle burns

**When Coal, oil and natural gas undergo combustion ;**

- the hydrogen atoms combine with oxygen to make water vapour, H<sub>2</sub>O [TEST A]
- the carbon atoms combine with oxygen to make carbon dioxide, CO<sub>2</sub> [TEST B]
- the maximum amount of energy is release

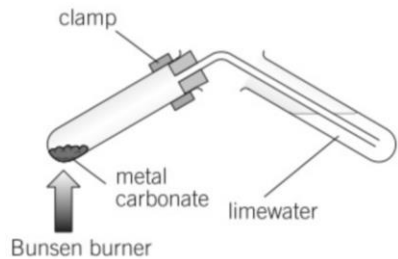


# KNOWLEDGE ORGANISER

## CHEMISTRY: Chemical Reactions

Name: \_\_\_\_\_

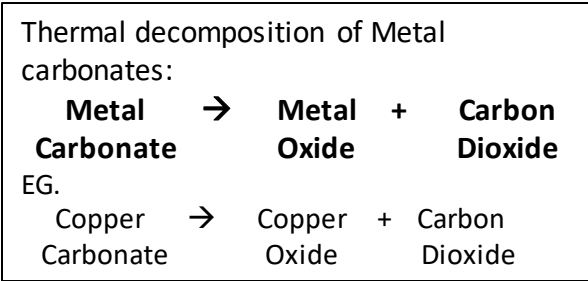
### Thermal Decomposition:



#### Thermal Decomposition:

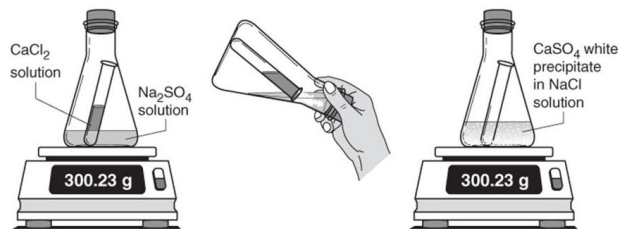
Type of reaction in which a compound breaks down to form two or more substances when it is heated.

**Many metal carbonates can take part in thermal decomposition reactions:**



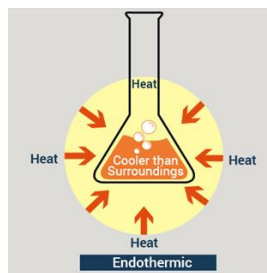
### Conservation of mass:

Atoms are not created or destroyed just rearranged in a reaction so the total mass of the products will be the same as the total mass of the reactants.



mass (g) of reactants = mass (g) of products

### Exo- and endo-thermic reactions:



#### Endothermic:

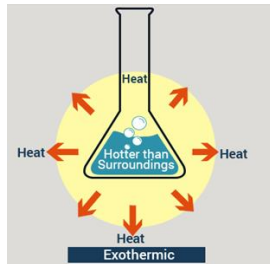
Reaction in which energy is taken in from the surroundings.

#### Examples:

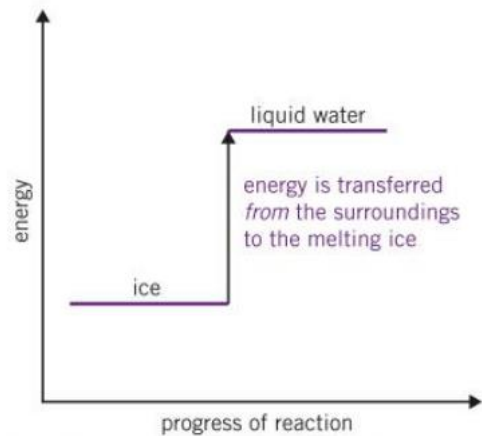
Exo	Endo
<ul style="list-style-type: none"> <li>burning</li> <li>neutralisation reactions</li> <li>respiration</li> </ul>	<ul style="list-style-type: none"> <li>thermal decomposition</li> <li>carbonates and acids</li> <li>photosynthesis</li> </ul>

#### Exothermic :

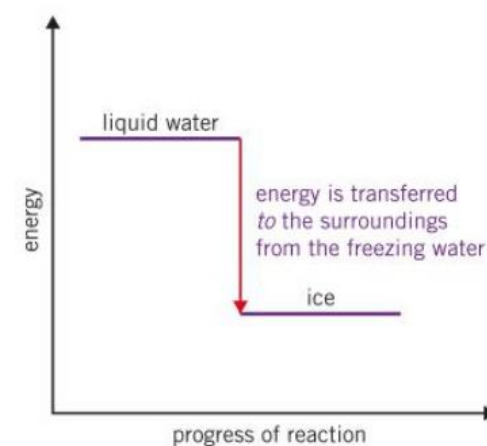
Reaction in which energy is given out to the surroundings. The surroundings then have more energy than they started with so the temperature increases.



### Energy Level Diagrams



Endothermic Reaction e.g water melting



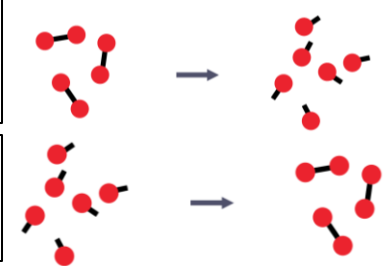
Exothermic Reaction e.g water freezing

Energy level diagrams help us to show the changes that occur during a reaction

### Making and Breaking Bonds:

Breaking Bonds = Endo

Making Bonds = Exo



Whether a reaction is endo or exo depends on which energy is greater- the making or the breaking of the bonds. Each chemical bond that is broken or made is given a value in kJ.

**Catalysts:**  
Speed up chemical reactions. They alter the rate of reaction without being changed by the reaction.  
**Enzymes: biological catalysts that speed up cellular reactions**





<b>Contact force</b>	These forces only act when two things are touching.
<b>Non-contact force</b>	These forces can act when things are not touching
<b>Newtons</b>	The units for measuring forces
<b>Drag force</b>	The force acting on an object moving through air or water that causes it to slow down.
<b>Friction</b>	The forces that slows things down when they move on a surface e.g. a car on a road.
<b>Streamlined</b>	When something is shaped to reduce friction or air resistance
<b>Law of moments</b>	An object is in equilibrium if the clockwise moments equal the anticlockwise moments.
<b>Upthrust</b>	The force on an object in liquid or gas that pushes them up
<b>Moment</b>	A measure of the ability of a force to rotate an object around a pivot.
<b>Elastic</b>	Something which stretching and springs back to its normal shape
<b>Deform</b>	When something changes shape
<b>Compress</b>	When an object is squashed
<b>Extension</b>	The difference between the original length of an object and the length when you apply a force.
<b>Pressure</b>	The ratio of force to surface area, in $\text{N}/\text{m}^2$ , and how it causes stresses in solids.
<b>Liquid pressure</b>	The pressure produced by collisions of particles in a liquid.
<b>Equilibrium</b>	When all of the forces on something are balanced and cancel out.

### Friction and drag

- **Friction** is a force which will slow down a moving object due to two surfaces rubbing on one another
- The greater the friction, the faster an object will slow down, or the greater the force it will need to overcome the force of friction. For example, it is easier to push a block on ice than on concrete, as the ice is smoother and causes less friction

- When an object is moving through a fluid, either liquid or gas, the force which slows it down is known as **drag**
- The fluid particles will collide with the moving object and slow it down, meaning that more force is needed to overcome this
- Both drag and friction are **contact forces** as the two surfaces in friction, and the object and fluid particles in drag, come into contact with one another
- Both drag and friction are forces so they are measured in **Newtons (N)**



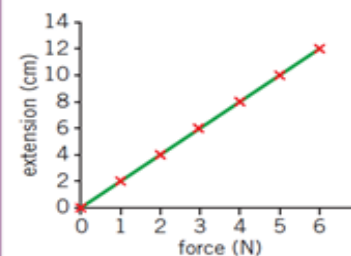
A solid moves through a gas.



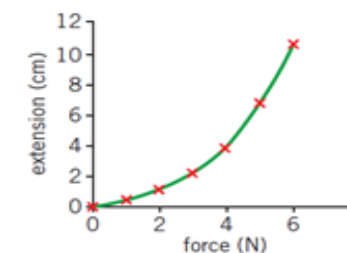
A solid moves through a liquid.

### Hooke's law

- Some objects, like springs, can be stretched, the amount that they stretch is known as their **extension**
- A force needs to be applied to the spring for it to be stretched, we can achieve this by adding masses which exert the force weight
- A spring will continue to stretch until it passes its **elastic limit**
- If an object obeys **Hooke's law** it will have a **linear relationship**: if the force applied to the spring is doubled, the extension will double too
- If an object does not obey Hooke's law, it will not have a linear relationship



This graph shows how the extension of a spring changes as you pull it



This graph shows the relationship between force and extension



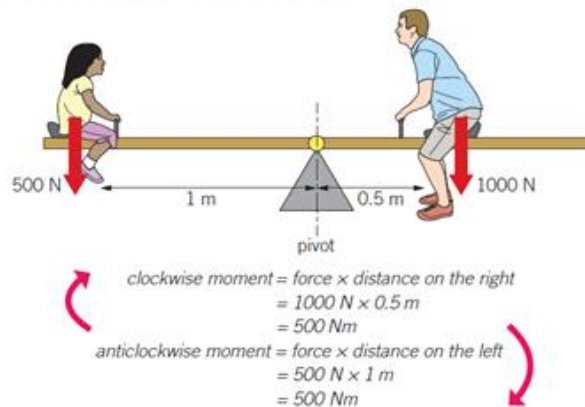


### Turning forces

- A **moment** is the turning effect of a force, it is measured in Newton meters
- We can calculate a moment with the equation:

$$\text{moment (Nm)} = \text{force (N)} \times \text{distance from the pivot (m)}$$

- The size of the moment will increase as the distance from the **pivot** or the size of the force increases
- When an object, such as a seesaw, is balanced, the clockwise and the anticlockwise moments will be equal and opposite, which is known as **equilibrium**
- When forces are equal and opposite to each other, there is no **resultant force**

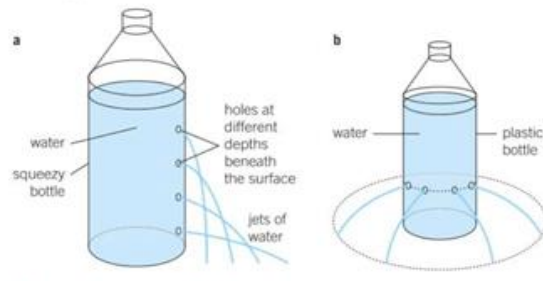
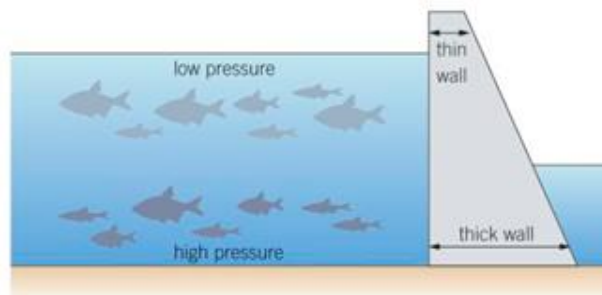


### Gas pressure

- Gas pressure** is caused by the particles of a gas colliding with the wall of the container which they are in
- The more often that the particles collide with the wall of the container, the higher the pressure of the gas will be
- Gas pressure can be increased by:
  - Heating the gas so the particles move more quickly and collide with the container with a higher energy
  - Compressing the gas so there are the same amount of particles within a smaller volume meaning that there are more collisions
  - Increasing the amount of particles within the same volume so there are more collisions
- Atmospheric pressure** is the pressure which the air exerts on you all of the time, nearer the ground there are more particles weighing down on you so the pressure is greater
- The higher you go, the smaller the atmospheric pressure, this is because there will be less particles weighing down on you

### Pressure in liquids

- Liquids are **incompressible**
- The particles in a liquid are already touching, meaning that there is little space between them to compress
- Liquids will transfer the pressure applied to them, this is seen in hydraulic machines
- As the ocean gets deeper, the pressure will increase, this is because the pressure depends on the weight of the water above
- The greater the number of water molecules above, the higher the pressure will be



### Pressure in solids

- The pressure which is exerted on a solid is known as **stress**
- The greater the area over which the force is exerted over, the lower the pressure, this is why snowshoes have a large area to prevent you sinking into the snow
- Pressure** can be calculated using the following equation:

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

$$\text{pressure (N/m}^2\text{)} = \frac{\text{force (N)}}{\text{area (m}^2\text{)}}$$

#### Worked example

A caterpillar vehicle of weight 12000 N is fitted with tracks that have an area of 3.0 m<sup>2</sup> in contact with the ground. Calculate the pressure of the vehicle on the ground.

**Solution**

$$\text{pressure} = \frac{\text{force}}{\text{area}} = \frac{12000 \text{ N}}{3.0 \text{ m}^2} = 4000 \text{ Pa}$$



BE REFLECTIVE: Review your learning

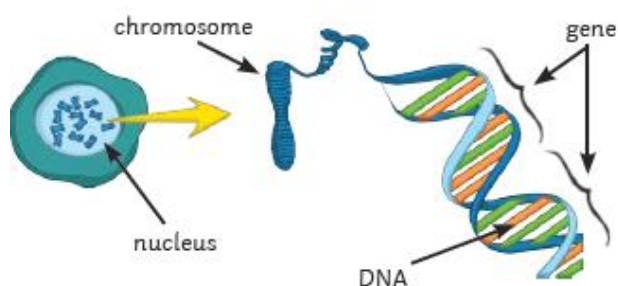


# KNOWLEDGE ORGANISER

## BIOLOGY: ORGANISMS - Genetics

Name: \_\_\_\_\_

### Structure of DNA



### Genetic modification

Altering an organisms genes to gain a desired characteristic of feature. GM crops are crops that have been produced by genetic engineering e.g.

#### Examples of genetic modification:

- Bacterial cells have human **insulin gene** inserted into them so that they produce insulin for diabetics.
- Frost resistant tomatoes
- Plants, such as rice, that have had genes inserted that make them **resistant to disease, insects, herbicides or more nutritious.**

#### Examples of desired characteristics :

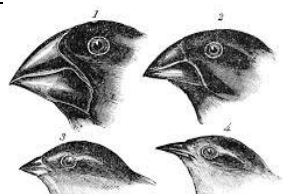
- Disease resistance in food crops.
- Animals which produce more meat or milk.
- Domestic dogs with a gentle nature.
- Large or unusual flowers.

### Evolution

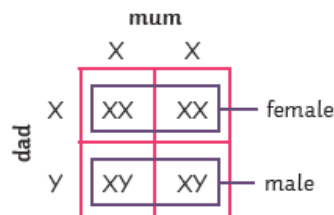
Scientific analysis of fossils shows that species have changed over long periods of time. This change is evolution. Charles Darwin first proposed this theory called **natural selection**. If a variation in the genes of an organism is advantageous in an environment, e.g. beak shape of finches beaks changed to allow them to find food easier, then it more likely to survive and pass that characteristic to its offspring.



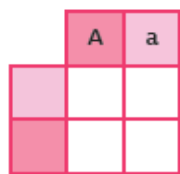
After the industrial revolution, the increased soot resulted in dark peppered moths being camouflaged more than light peppered moths, so they were less likely to be eaten and more survived and passed on their advantageous genes via **natural selection**



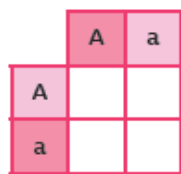
### Inheritance and Punnet squares



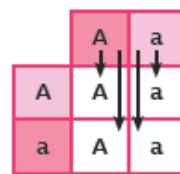
Females carry two X chromosomes.  
Males carry one X and one Y chromosome.



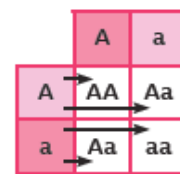
**Step 1:**  
Put the two alleles from one parent into the boxes at the top. This parent has one dominant allele and one recessive allele



**Step 2:**  
Put the two alleles from the second parent into the boxes on the left. This parent also has one dominant and recessive allele.



**Step 3:**  
Put the alleles from the first parent into the two boxes underneath them.



**Step 4:**  
Put the alleles from the second parent into the boxes next to the letters from the first parent (capital letters first).

### Extinction and conservation

**Extinction:** A species becomes extinct when there are no more individuals of that species left, so we must rely on fossils to prove existence.



**Conservation and biodiversity**  
Seed banks are a conservation measure for plants. Seeds are carefully stored so that new plants may be grown in the future.

### Key vocabulary

<b>DNA</b>	<b>Genetic material.</b> DNA is a <b>polymer</b> made up of <b>two strands</b> forming a <b>double helix</b> . The DNA makes up chromosomes.
<b>Gene</b>	A gene is a <b>small section of DNA</b> on a chromosome..
<b>Chromosome</b>	A <b>long coil of DNA</b> . Found in the nucleus.
<b>Allele</b>	<b>Different versions of the same gene</b> – dominant and recessive.
<b>Dominant</b>	A dominant allele is <b>always expressed</b> Only <b>one copy</b> is needed.
<b>Recessive</b>	Only <b>expressed if two copies are present</b> .
<b>Allele</b>	<b>Different versions of the same gene</b> – dominant and recessive.
<b>Mutation</b>	A <b>random change</b> in the <b>DNA</b>
<b>Genetic modification/ Engineering</b>	A process which involves <b>modifying the genome</b> of an organism by <b>introducing a gene</b> from another organism to give a desired characteristic
<b>Evolution</b>	The <b>change in the genes of a population over time</b> . Occurs through natural selection.
<b>Fossil</b>	The preserved remains of an organism from many thousands of years ago. They can also show changes/evolution over time
<b>Gene banks</b>	Conservation method that stores genetic examples of different species



# Year 9 Philosophy and Ethics Knowledge Organiser

- Philosophy**
- Introduction to philosophy
  - Plato's cave
  - Cosmological argument
  - Design argument

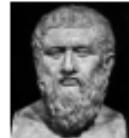
**Key Topics:**

- Ethics**
- Introduction to morality
  - Utilitarianism
  - Situation ethics
  - Conscience

**Philosophy**

**Philo = love**

**Sophos = wisdom**



The 'Allegory Of The Cave' is a theory put forward by Plato, concerning human perception. Plato claimed that knowledge gained through the senses is no more than opinion and that, in order to have real knowledge, we must gain it through philosophical reasoning.

**Plato's cave**



**Philosophy**  
*Questions that may never be answered.*



## Aquinas – 1225-1274

Aquinas argued that everything in the universe needs a cause and nothing can cause itself. He argued that there must be a beginning for all causes which he called the "first cause" which is uncaused by anything else. He argued that this is God/



## Paley – 1743-1805



Paley argued that the evidence of design in the universe demonstrates that there must be a designer. He used a piece of technology to illustrate his analogy (a watch – which was the most technologically advanced machine of the time). He used this analogy to point to a designer of the universe - God.



**Subject Specific Key Terms:**

<b>Causation</b>	The action of causing something
<b>Conscience</b>	A person's moral sense of right and wrong, viewed as acting as a guide to one's <u>behaviour</u> .
<b>Cosmological</b>	Relating to the origin and development of the universe
<b>Design</b>	Purpose or planning that exists behind an action, fact, or object
<b>Ethics</b>	Moral principles that govern a person's <u>behaviour</u> or the <u>conducting of an activity</u>
<b>Morality</b>	Principles concerning the distinction between right and wrong or good and bad <u>behaviour</u>
<b>Philosophy</b>	The study of nature, reality and ideas
<b>Philosopher</b>	A person who studies philosophy; someone who studies reality and existence
<b>Situation ethics</b>	flexible application of moral laws according to circumstances based on the rule of love
<b>Utilitarianism</b>	The teaching that an action is right in so far as it promotes happiness, and that the greatest happiness of the greatest number should be the guiding principle of conduct.
<b>Ultimate questions</b>	An Ultimate Question is a <u>question that does not have an answer</u> , or where people cannot agree what the answer might be.

### Ethics

**Ethics** is the philosophical study of morality, and morality consists of beliefs concerning right and wrong, good and bad. These beliefs can include judgments, principles, and theories. Participating in the exploration of morality—that is, doing **ethics**—is inescapable.



### Morality

**WRONG** is **WRONG**,  
even if *everyone* is doing it.  
**RIGHT** is **RIGHT**,  
even if *no one* is doing it.

### Moral Relativism

**Situational ethics** is looking past the standard **right** and **wrong**, and performing what the circumstances demand.



### Situation ethics



#### Summary – situation ethics

- It is an attempt to link Christianity with new morality for 'man come of age' (Robinson)
- It focuses on Jesus' parable of the Good Samaritan and opposition to Pharisaic legalism
- It rejects absolute rules as it solves moral dilemmas situationally and circumstantially
- It focuses on positivism and personalism
- It is a form of Christian ethic - 'principled relativism' is how Fletcher describes it

**Situation ethics** was written by **Joseph Fletcher** in the 1960s. He was inspired by the love which Jesus showed to the people he helped. He theorised that basing morality on doing the most loving thing was the most important factor in deciding whether a moral issue was right or wrong. A famous example would be if a 12 year old girl was pregnant, should she be allowed to have an abortion? What would be the most loving thing in the circumstances?

### Utilitarianism



**Summary of the Components of Utilitarianism**

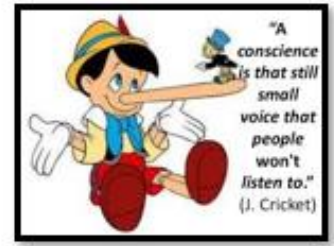
- Utilitarianism is a moral philosophy that holds that:
  - Moral good is judged in terms of **consequences**
  - Consequences are evaluated in terms of human **well-being**
  - Human well-being is evaluated in terms of **individual preferences**
  - The rightness of an action is judged by the aggregate well-being, or good, it yields
  - The morally justified action **maximizes aggregate well-being**



### Conscience

#### Where does our conscience come from?

Conscience is your inner sense of right and wrong. Some liken it to being the voice of God because it is the innate morality that all people have. However, if this is the case why doesn't everyone have the same values? Why do some people go against their conscience? What problems might this cause if someone believes that they are acting on their conscience to justify murder?







## Year 9 Knowledge Organiser – Women’s fight for the vote



### Key Dates

- 1819** **Peterloo Massacre** saw 15 people killed and 600 injured when people in Manchester protested for the vote.
- 1832** First petition for women’s right to vote created by **Mary Smith** and presented by **Henry ‘Orator’ Hunt**
- 1832 – 1848** **The Chartists** fought for men’s right to vote.
- 1857** **Divorce and Matrimonial Causes Act** allowed women to divorce husbands who abused them
- 1865** **Elizabeth Garrett Anderson** became the first female doctor in Britain. **Barbara Leigh Bodichon** forms the Women’s Suffrage Committee.
- 1866** Famous petition signed by 1,499 women including **Florence Nightingale**.
- 1882** **Married Woman’s Property Act** allowed women to keep their property when they married.
- 1887** **Leicester Women’s Suffrage Society** was formed by **Agnes Archer Evans**
- 1897** **National Union of Women’s Suffrage Societies (NUWSS)** formed by **Lydia Becker** and **Millicent Fawcett**. They are nicknamed the **Suffragists**.
- 1903** **Women’s Social and Political Union (WSPU)** is formed by **Emmeline Pankhurst** with her daughters **Sylvia** and **Christabel**.

### Key Words

- Cat and Mouse Act** – Law passed in 1913 which meant the government could release Suffragettes while they were ill and re-arrest them when they became well again.
- Constituencies** – An area of the country which can vote for their MP. Examples include Harborough or Leicester South.
- Democracy** – The system which allows people to vote for their government.
- Franchise** – The people who can vote. If people want to extend the franchise, it means they want to increase the number of people who can vote.
- Government** – The group of people who run the country.
- House of Commons** – The area of parliament which has MPs who are elected to serve the people. They debate and vote for laws.
- Member of Parliament (MP)** – The person who is voted for by people in a particular area who then represents them in the House of Commons.
- Monarch** – The king or queen.
- Parliament** – the name for both the House of Commons and the House of Lords. Both of these are part of Britain’s system of running the country.
- Prime Minister** – The person who runs the government.
- Suffrage** – The right to vote.
- Vote** – A right to choose the government who runs the country.
- Women’s Suffrage** – The right for women to vote.

### Key People

- Emmeline Pankhurst** – Lead of the Suffragettes (WSPU)
- Christabel & Sylvia Pankhurst** – Daughters of Emmeline Pankhurst and joint leaders of the WSPU. Sylvia refused to get involved in war work in World War One.
- Millicent Fawcett** – Leader of the Suffragists (NUWSS)
- David Lloyd George** – Politician who was a supporter of women’s suffrage. His house was bombed by the Suffragettes in 1913. He became Prime Minister in 1915.
- Herbert Asquith** – Politician who was not a supporter of women’s suffrage until around 1917.
- Emily Davison** – Suffragette who bombed Lloyd George’s house and who was killed when trying to pin a scarf on the King’s horse in 1913.
- Sophia Duleep Singh** – Indian princess and high profile Suffragette who protected people against violence, particularly on Black Friday.
- Edith Garrud** – Expert in martial art of jujitsu who trained Suffragettes to defend themselves from the police.





## Year 9 Knowledge Organiser – Women’s fight for the vote

### Key Dates

- 1905** **Christabel Pankhurst & Annie Kenney** disrupt political meeting of the Liberal party by shouting over them.
- 1907** **Alice Hawkins** joins Leicester Suffragettes.
- 1910** Suffragettes use violent tactics to win publicity. **Black Friday** sees Suffragettes assaulted and arrested by police. Suffragettes start hunger-strikes in prison. Government starts force-feeding.
- 1913** **Emily Davison** bombs **Lloyd George’s** house. **Cat and Mouse Act** passed. **Emily Davison** is killed at the Derby.
- 1914** **First World War** breaks out.
- 1915** Women are encouraged to start war work such as working in **munitions**.
- 1918** **First World War** ends. **Representation of the People Act** is passed, giving all women over 30 with £5 property the vote.
- 1928** **Equal Franchise Act** - Women over 21 with no property could now vote (same as men).

### Key Words

- Anti-suffrage** – some people (including women) campaigned against women getting the vote.
- Force-feeding** – In order to keep them alive, the prison guards would feed Suffragettes by putting a tube down their throat and tipping liquid like soup down it.
- Hunger strike** – Suffragettes would stop eating while in prison, in protest against being treated as criminals.
- Munitions** – Ammunition and weapons.
- Pacifist** – someone who does not support war.
- Petitions** – List of signatures from the public saying that they support an issue. It is designed to influence MPs by showing how popular an idea is.
- Poor Law Guardians** – People who had to check the poor law was being followed, including the treatment of the poor in the workhouses.
- Workhouses** – Like prisons for poor people. They had to do hard work, wore prison uniforms, and were separated from their families.

### Key Facts: Women in the 19<sup>th</sup> Century

- Women were not allowed to vote or become **MPs**
- Some women took positions of responsibility as **Poor Law Guardians** to show that they were responsible.
- In **1865 Elizabeth Garrett Anderson** became the first female doctor in Britain. Many other women went on to train in other professions such as lawyers, but many were also stopped by universities who refused to give them their qualifications.
- Before the **1857 Divorce and Matrimonial Causes Act** women could not divorce their husbands even if they were abused by them.
- Before the **1872 Infant Custody Act** children belonged to their father who could stop their mother from seeing them.
- Before the **1882 Married Woman’s Property Act** women had to give up their property when they got married.
- Women were believed to be mentally and physically inferior. They were seen as too emotional to be able to vote. Many women tried to challenge this.
- Women were expected to focus on getting married and having children if they were Middle Class. Working Class women had to do this and find paid work to support their families – but women’s work was always paid lower than men’s.

### Early Campaign

- In **1865, Barbara Leigh Bodichon** formed the **Women’s Suffrage Committee**. She campaigned for women’s rights by publishing pamphlets and signing petitions. She helped influence the government to pass the **1882 Married Woman’s Property Act**.
- **Lydia Becker** set up the **Manchester Suffrage Committee**. She campaigned for improvements in education which led to the **1870 Education Act** which created better education for girls.
- **Agnes Archer Evans** set up the **Leicester Women’s Suffrage Society in 1887**.
- Although early campaigns helped get some laws passed, they still did not manage to get the law changed so that women could vote.



## The Suffragists (NUWSS)



- Formed in 1897
- Led by Lydia Becker and Millicent Fawcett
- Colours were red (dignity), white (purity), green (hope)
- Only used peaceful methods such as petitions, marches, speeches, letter-writing etc.
- In 1897 they published a petition which got 230,000 signatures – a large number at the time.
- Historians debate how much influence they had. Many Suffragists continued to campaign during the First World War and helped to draft the Representation of the People Act which gave women the vote.
- Peaceful tactics often won them a lot of support, in contrast to the Suffragettes who were often seen as terrorists.
- Peaceful tactics also showed that women were responsible and not emotional and irrational as some people argued.
- Many Suffragists also continued to campaign after 1918 for women to get equal voting rights. This was won in 1928.

## The Suffragettes (WSPU)



- Formed in 1903
- Led by Emmeline Pankhurst and her daughters Sylvia and Christabel
- Had been Suffragists but became frustrated with the slowness of change and so turned to violent tactics. From 1910 they were becoming most famous for violent tactics, although they continued to use peaceful ones.
- Slogan "Deeds not words".
- Colours white (purity), purple (freedom and dignity), green (hope).
- 1905 Annie Kenney and Christabel Pankhurst disrupted a meeting of the Liberal Party by shouting slogans.
- 1909 Edith Garrud started teaching Suffragettes jujitsu.
- Black Friday in 1910 saw 300 Suffragettes on a peaceful march being assaulted by police officers. One woman in a wheelchair was beaten and kicked. Sophia Duleep Singh used her status to protect a number of women. Many women were arrested.
- 1910 violent tactics included throwing stones at politicians, rocks through shop windows, setting fire to post boxes, using bleach to write slogans on golf courses.
- 1913 Elsie Duval and Olive Beamish set fire to the house of Lady White (an anti-suffrage campaigner), causing £3,000 worth of damage (£400,000 today).
- 1913 Emily Davison planted two bombs at Lloyd George's house, causing £500 worth of damage (£55,000 today).
- 1913 the Liberal government passed the Cat and Mouse Act which allowed them to release Suffragettes who were on hunger strike, only to rearrest them when they got better. This stopped women dying while in prison.
- 1913 Emily Davison was killed trying to pin a Suffragette scarf on the King's horse at the Derby. 6,000 Suffragettes led a peaceful funeral march.
- 1914 the Suffragettes dissolved in order to support the war effort. Sylvia refused to get involved as she was a pacifist.

## World War One



- When war broke out in 1914 the government thought women's role was to encourage men to sign up to fight and to look after their homes and children.
- By 1915 there was a shortage of munitions and women were encouraged to work in war industries. Around 1 million women worked in munitions which was very dangerous.
- Women also joined nursing organisations such as Queen Alexandra's Royal Army Nursing Corps. Others were ambulance drivers on the front line or doctors either in the trenches or in hospitals in Britain.
- Flora Sandes was the only British woman to fight on the frontline in World War One. Women were not allowed to fight in the British army so she joined the Serbian army. She became Serjeant-Major.
- 1917 the Women's Land Army was set up to provide food to Britain. Around 23,000 women joined.
- Women were also ticket collectors, bus drivers, police officers, firefighters, post office workers, telephone operators, delivery drivers etc.
- Some women were pacifists and campaigned for an end to the First World War.
- At the end of the war, most women were expected to give up their jobs, but many fought to keep them.

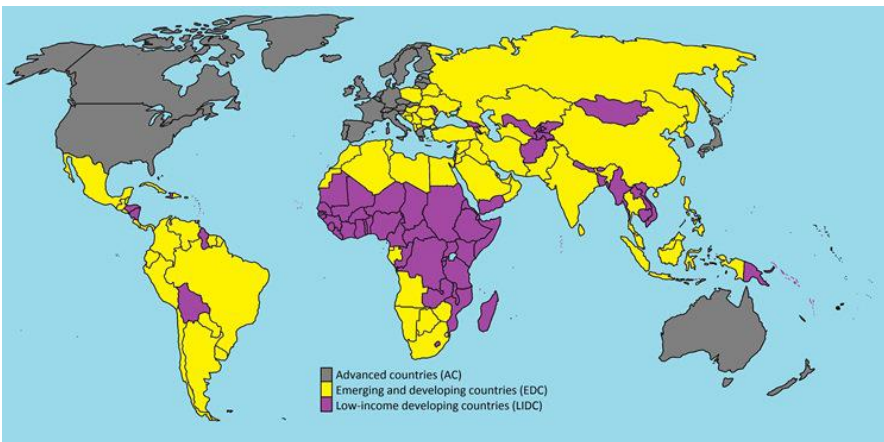
## The Vote

- Women over 30 with £5 of property won the vote in 1918.
- The government wanted only Middle and Upper Class women to vote and hoped that over 30 years old they might have a husband to tell them what to do.
- Women campaigned to have equal voting rights, which they won in 1928.

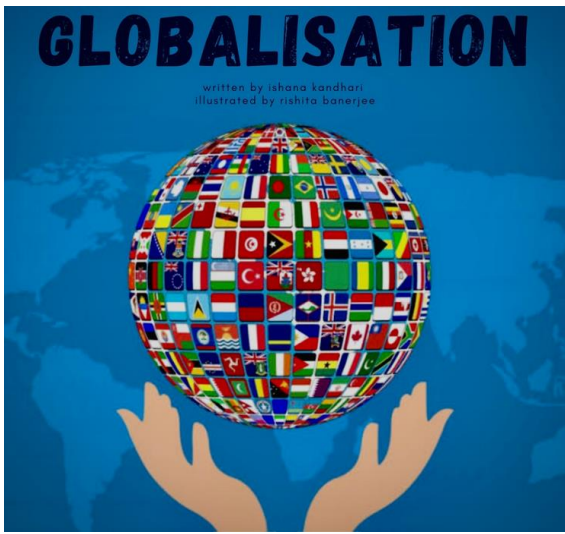




Classification of countries



Advanced Countries (ACs), Emerging and Developing Countries (EDCs) and Low-Income Developing Countries (LIDCs.) LIDCs are found mainly in Africa with some in Asia and Central and South America. EDCs are mainly in South America, Asia and northern and southern Africa. ACs are found in North America, Oceania and Europe.

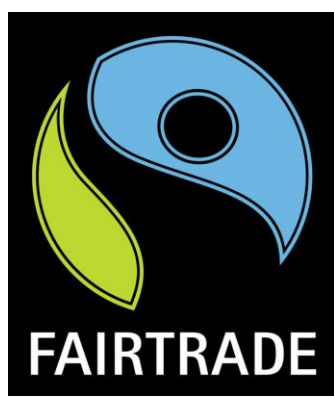


*Globalisation refers to the increasing interconnectedness and interdependence among countries' economies, populations and cultures. This can be attributed to factors that include trade between countries, migration and technological advancements.*

Some factories are known as sweatshops. Sweatshops often have poor working conditions, unfair wages, unreasonable hours, child labour, and a lack of benefits for workers.



Trans national company: **Companies** that operate in several countries are called TNC's. The headquarters are usually in an AC, factories in EDCs and their products are sold all around the world.



Fairtrade changes the way trade works through better prices, decent working conditions and a fairer deal for farmers and workers in LIDCs. Fairtrade's approach enables farmers and workers to have more control over their lives and decide how to invest in their future.





**What is aid?**

Aid is money or help given by one country/organisation to another country/group in need of help.  
Short term aid is given when urgent help is required e.g after an earthquake or during a war.  
Long term aid helps communities to develop for the future e.g building schools or training nurses.

**What are the different types of aid?**

TERM	DEFINITION
<i>Bilateral</i>	<i>Monetary or other assistance given from one country to another. E.g. Australia giving aid to East Timor</i>
<i>Multi-lateral</i>	<i>Provided by a number of countries, often through an international organisation, or through a number of countries agreeing to help out. E.g. Australia, NZ, USA and China giving aid to Japan after the tsunami.</i>
<i>Tied Aid</i>	<i>Aid provided where a country ensures that the money is spent on what they are giving the aid for. Sometimes it is given with an agreement that the receiving country will now trade goods and services with them.</i>

Advantages & Disadvantages of Foreign Aid

Foreign Aid	
Pros	Cons
<ul style="list-style-type: none"> <li>Foreign aid can help to make the world fairer</li> <li>Important tool to reduce poverty</li> <li>Supply with sufficient food</li> <li>Supply with important medical equipment</li> <li>Foreign aid can help to restore peace</li> <li>Better access to education</li> <li>Foreign aid can help to mitigate the problem of fundamentalism</li> <li>Can help to improve trade relationships</li> <li>Technological progress in a country might increase</li> <li>Foreign aid can help to reduce the spread of diseases</li> <li>Countries can become more independent in the long run</li> <li>More important infrastructure investments</li> <li>Foreign aid also makes sense from an ethical perspective</li> </ul>	<ul style="list-style-type: none"> <li>Part of the money will not end up where it should be</li> <li>Some countries are favored over others</li> <li>Foreign aid is often done with a hidden agenda</li> <li>Money from foreign aid may be used quite inefficiently</li> <li>Foreign aid may contribute to higher inflation</li> <li>May lead to frustration in the country where money flows off</li> <li>Countries who give the money will also gain power in aid-receiving countries</li> <li>Free market forces may no longer work properly</li> <li>Smaller businesses may lose their competitiveness</li> <li>Investors may exploit foreign countries</li> <li>May not be enough to solve structural problems</li> <li>Foreign aid can do more harm than good if not implemented properly</li> </ul>

**What is debt?**

*“an amount owed to a person or organisation for funds borrowed.”*

How did these LIDC’s gain the debt?

They have borrowed from other countries and global banks in order to develop. However, the interest rates are so high that they have struggled to pay back the money and therefore go in to debt.

LIDCs can be exploited by TNCs and often rely on selling raw materials. The price of raw materials fluctuates a lot and is worth less than manufactured products making it harder for the LIDC to make money.

### Introduction to climate change: key words

**Greenhouse effect:** the trapping of the Sun's outgoing radiation by a layer of greenhouse gases in the atmosphere. These gases include carbon dioxide and methane.

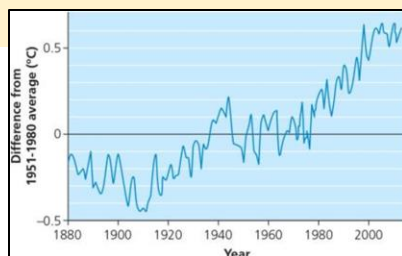
**Global warming:** an increase in the temperature of the Earth due to more heat being trapped by greenhouse gases.

**Climate change:** significant changes in global temperature, precipitation (rainfall) and winds.

Climate change is a **controversial issue** as people have different opinions as to whether it is a natural process or if it is caused by human activity.

### Evidence for climate change

- Temperature increase is key evidence that climate is changing.
- Significant reduction in Arctic sea ice cover.
- These indicators will all **increase**; air temperature, humidity, temperature over oceans and ocean heat content.
- These indicators will all **decrease**; glacier cover, snow cover and sea ice cover.



### Causes of climate change

Earth's temperature has fluctuated (changed) over time during **glacials** – cold periods when much of the Earth was covered in ice, and **interglacials** – warmer periods such as today.

Since the Industrial Revolution the concentration of greenhouse gases in the atmosphere has increased which has led to global warming.

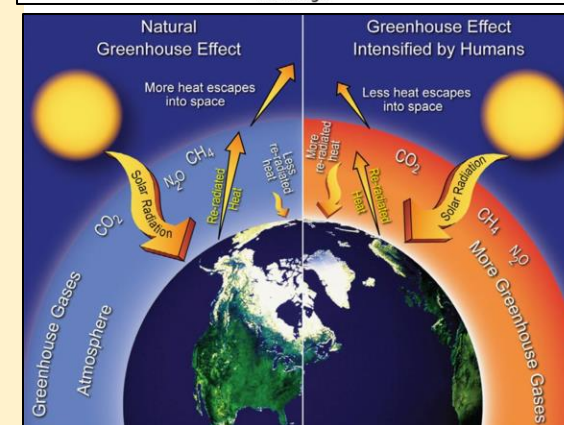
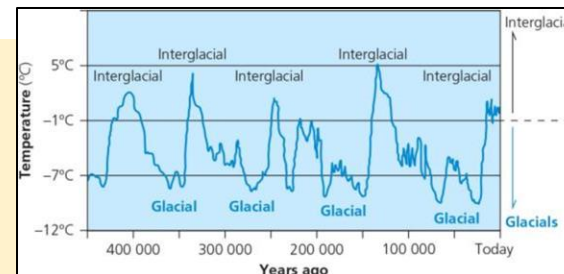
The main differences between the natural and human enhanced greenhouse effects are:

- Human enhanced has a thicker layer of greenhouse gases.
- Human enhanced has more heat reflected back down to Earth.
- Human enhanced has less heat escaping to space.

### Global impacts of climate change

#### **Social impacts**

- Sea level rise will affect 80 million people – causing homes to flood and people to relocate.
- Tropical storms will increase in magnitude (strength) – destroying houses and making people homeless.
- Some areas will receive less rainfall so there will be more water shortages.
- Some crops will not be able to be grown leading to hunger.
- Diseases such as malaria increase, an additional 280 million people may be affected



### Impacts of climate change in the UK

#### **Social impacts**

- Droughts and floods could be more common, especially droughts in London and the south east.
- Flooding of coastal areas and rivers will increase.
- Summers will be warmer so more people may stay in the UK and not go overseas.

#### **Environmental impacts**

- Bird migration patterns may change.
- Trees and plants will flower earlier.

#### **Economic impacts**

- New crops can be grown e.g. oranges meaning less food needs to be imported.
- Cost of protecting against flooding will increase.
- More money may need to be spent on ensuring sufficient water supplies in some areas.

### Global impacts continued

#### **Environmental impacts**

- Species in affected areas (e.g. Arctic) may become extinct
- Some animals may not be able to adapt to changes in climate and their habitats could be destroyed.

#### **Economic impacts**

- Increased cost of flood defences for low lying cities e.g. Venice, and repairing damage caused by natural disasters.
- Some countries may not be able to sell food and have to import more food.
- Cost of relocating people who have had to leave their homes.



### Impacts of climate change in Antarctica

- Temperatures have increased by 3 degrees Celsius.
- Large chunks of ice shelves are breaking away each summer and since 1950s, 25 000 kilometer squared has melted.
- Adelie penguin numbers have declined, as have Emperor penguin numbers in the south.
- Krill numbers have decreased by 80% since the 1970s. These creatures are an important source of food for whales, seals and penguins.
- Ice melting in Antarctica can cause sea level in other parts of the world to increase at a rate of 3mm per year.

### Climate change adaptation and mitigation

**Adaptation:** These strategies aim to respond to climate change by limiting negative impacts, e.g. barriers against sea level rise.

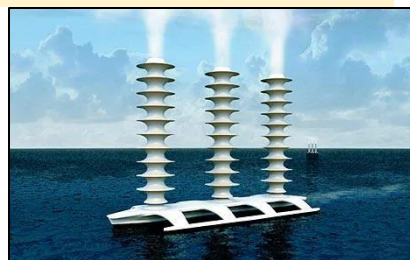
**Mitigation:** Actions to reduce climate change. E.g. planting trees and international agreements.

#### **The Paris Climate Agreement:**

- Signed in 2015 by 189 countries.
- Agreed to keep global warming below 2 degrees Celsius.
- Wealthier countries would help support countries with less money to meet their target.

#### **Geo-engineering:**

- Deliberate manipulation (changing) of the Earth's climate.
- E.g. covering roofs and roads to reflect sunlight.
- Spraying sea water into clouds to make it rain.



### Plastic pollution in the oceans

- Plastic pollution has increased dramatically in recent years as more and more products are made of plastic as it is cheap and strong. However, plastic is often thrown away and not recycled.
- Plastic is transported by spiralling ocean currents or gyres and it breaks down into tiny particles which are eaten by fish and sea creatures who think they are food.
- Solutions to the problem; boycott (avoid) single-use plastic, use re-usable bottles and coffee cups, buy products made from recycled materials.

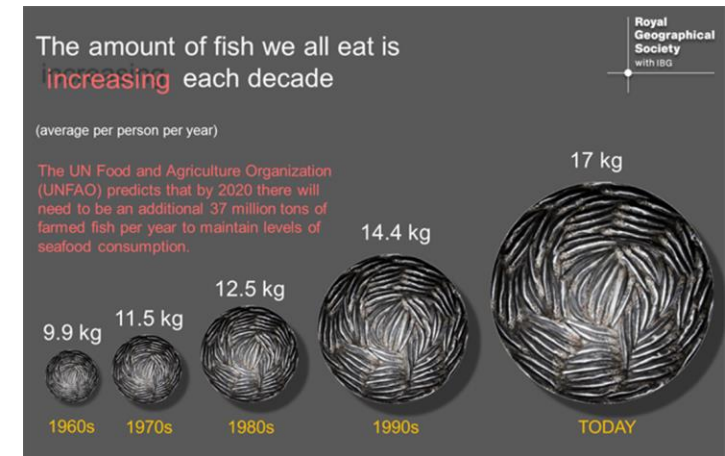
### Plastic pollution in the oceans

- In recent years deforestation has significantly increased in Malaysia to clear land to grow palm oil which is widely used in food and beauty products, for logging, mining and hydro-electric power.
- This deforestation has had many impacts; reduced biodiversity as species have lost habitats, forest fires as trees can be burned to clear them and these get out of control, disruptions to the water cycle, soil erosion and an increase in greenhouse gas emissions.
- Solutions to deforestation include buying products with sustainable palm oil or using alternatives to palm oil, paying people to protect the forest e.g. through eco-tourism.

### Climate change and the Earth's future summary

This topic has focused on climate change and some of the other challenges facing our planet.

A key theme for this topic is the idea of sustainability; **Using resources responsibly so that the needs of the present generation are met without compromising the ability of future generations to meet their needs.**



### Overfishing

- As world population has increased there is increasing demand for fish which is the main source of protein for 3 billion people.
- As a result of this demand, 70% fish stocks are being overfished or exploited.
- **Overfishing - the process of depleting (significantly reducing) the amount of fish available by fishing too much.**
- Solutions - creating marine reserves (these currently only make up 1% of Earth's oceans) where fish are protected, setting quotas or limits on number of fish that can be caught or marking tins of fish with whether they have been sustainably caught or not – pole and line tuna is most sustainable.





# KNOWLEDGE ORGANISER - CHORDS & MELODY



**DIATONIC HARMONY** is derived from harmonising (turning notes into chords) each note of the major scale. For example; if you take the first note in the C major scale (C) and add the **THIRD** note of the scale (E) and the **FIFTH** note of the scale (G) - you create a C major **TRIAD CHORD**.

Chord Name

C	Dm	Em	F	G	Am	Bdim	C
CEG	DFA	EGB	FAC	GBD	ACE	BDF	CEG
I	ii	iii	IV	V	vi	VII	I

There is a rule that states that chords *I*, *IV* and *V* in any major keys are always **MAJOR TRIAD CHORDS**, chords *ii*, *iii* and *vi* are always **MINOR TRIAD CHORDS** and chord *VII* is always a **DIMINISHED TRIAD CHORD** (used rarely/with caution).

**IN MINOR KEYS, THE SAME IS TRUE BUT WE CAN USE A MINOR OR MAJOR CHORD ON DEGREES IV AND V.**

Some common chord progressions (chords sequenced in a pleasing way)

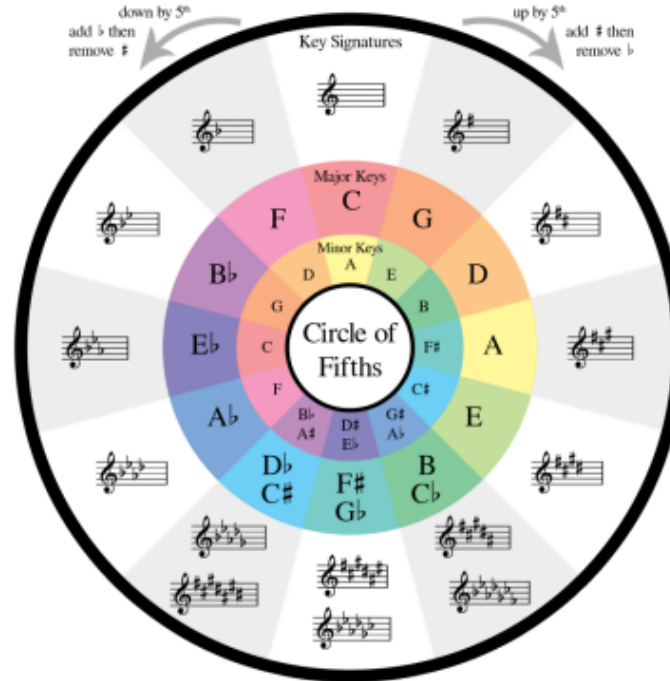
I - V - vi - V	I - V - vi - IV	I - V - vi - V	I - bVII - IV - I	Minor Sounding →	i - bIII - bVII - IV	i - bVII - bVI - bVII
I - IV - V - I	vi - IV - I - V	I - vi - IV - V	I - V - vi - IV		i - bVII - bVI - V	i - bVII - v - bVI



# KNOWLEDGE ORGANISER - CHORDS & MELODY



Key Signature	Major Key	Minor Key
	C	a
	G	e
	D	b
	A	f sharp
	E	c sharp
	B	g sharp
	F Sharp	d sharp
	C Sharp	a sharp
	F	d
	B Flat	g
	E Flat	c
	A Flat	f
	D Flat	b flat
	G Flat	e flat
	C Flat	a flat



Every MAJOR key has a **RELATIVE MINOR** key (and vice versa). To work out the relative minor of any major key you just go **DOWN BY THREE SEMITONES**.

**Sharp (#) Key Signatures:** Father Charles Goes Down And Ends Battle

**Flat (b) Key Signatures:** Battle Ends And Down Goes Charles' Father



In sharp keys, **ONE NOTE ABOVE THE LAST SHARP** is the name of the key (Major).

In flat keys, **THE SECOND LAST FLAT** is the name of the key (Major).

Natural Minor:

Harmonic Minor:

Melodic Minor:

**Inversions**

Root Position: Root in bass

First Inversion: Third in bass

Second Inversion: Fifth in bass

Remember that **AUGMENTED** chords, **SLASH** chords and other **CHROMATIC VARIATIONS** can add interest and colour to your chords!!

## Drama Year 9 – Topic 1

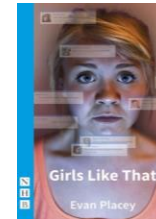
## Features of a performance text - Girls Like That by Evan Placey

Features of a **script**

What is a <b>script</b> ?	The story that has been written for actors to perform
What is the name given to the writer of the script?	<b>Playwright</b>
Acts in a play are broken up into a number of?	<b>Scenes</b>
The words an actor speaks in the script is called?	<b>Dialogue</b>
The parts of the script describing the actions, setting & characters are called?	<b>Stage directions</b> — usually written [in brackets] or <i>italics</i>
What is the name given to the person responsible for setting the play on stage?	<b>Director</b>
A person written about in a script is called a?	<b>Character</b>

## Key Knowledge

- Written in 2013 by Evan Placey. *'An urgent and explosive play that explores the pressures on young people today in the wake of advancing technology.'*
- Placey has written this play to raise awareness of peer pressure, the dangers of social media and how you take your power back.
- Sexting - the action or practice of sending sexually explicit photographs or messages via mobile phone.



## Key Skills

- Hot seating** - Dramatic technique where an actor 'in character' is questioned
- Still-Image** - A freeze frame which highlights a key moment to your audience
- Improvisation** - Scene or movement made up on the spot by the performer
- Monologue** - A speech made by just one actor (mono)
- Role Play** - Actors perform and react as if they are real people dealing with real events



## Physical skills

These skills are linked to the ways an actor **uses their body** to communicate their **character**. They are all **non verbal communication skills**, meaning you do not talk or make any sound!

Body Language- Posture  
Body Language – Gestures  
Facial expressions



## Vocal skills

These skills are linked to the ways an actor **uses their voice** to communicate their **character**. There are **6 key elements** you are going to explore.

Pause, Pitch, Pace, Volume, Accent, Tone

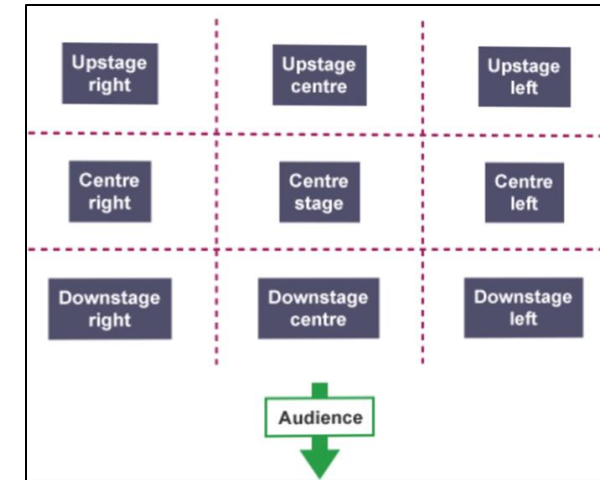


## Genre:

The **genre** of a play refers to the type of story being told and is decided by the playwright. Think Netflix!



## Areas of a stage



Stage directions are written from an actors point of view on stage not from the audiences point of view.

## Key Vocabulary

**Atmosphere** - The mood created by the script, actors, lights and sound

**Character** - A character in a play has a recognisable personality

**Costume** - Clothes or items an actor wears to suggest things about their character

**Devised** - Scene, dialogue or movement made up by the performer

**Props** - Objects used on stage to enhance a scene or reinforce an idea

**Intent** - What is the drama communicating to the audience? What is the key message of the piece? How do you want the audience to react?

**Genre** - Category it falls under (comedy, tragedy, family drama, musical)

**Style** - How the piece is performed (naturalistic, non-naturalistic/abstract, physical) Breaking the 4<sup>th</sup> wall

GCSE Dance Knowledge Organiser

Exam command words

- Analyse:** Separate information into components and identify characteristics to be able to explain and interpret.
- Comment:** Present an informed option.
- Compare:** Identify similarities and/or differences.
- Consider:** Review and respond to information given.
- Define:** Specify meaning.
- Describe:** Set out characteristics.
- Discuss:** Present key points taking into account different ideas, characteristics and/or features.
- Evaluate:** Judge from available evidence and make an informed design on the effectiveness.
- Explain:** Set out purposes or reasons.
- Give:** Produce an answer from recall.
- How:** State in what ways.
- Identify:** Name or characterise.
- Interpret:** Translate information into recognisable form demonstrating an understanding of meaning.
- Name:** Identify correctly.
- Outline:** Set out main characteristics.
- State:** Express in clear terms.
- Suggest:** Present a possible case or possible answer.
- Tick:** Put a mark to indicate something is correct.
- What:** Specify something.
- Which:** Specify from a range of possibilities.
- Why:** Give a reason or purpose.

Knowledge, understanding and skills for performance

Expressive skills

- Projection.
- Focus.
- Spatial awareness.
- Facial expression
- Phrasing
- Musicality
- Sensitivity to other dancers
- Communication of choreographic intent

Physical skills

- Posture
- Alignment
- Balance
- Coordination
- Control
- Flexibility
- Mobility
- Strength
- Stamina

Technical skills

- Action
- Space
- Dynamics
- Relationships
- Timing
- Rhythmic content
- Moving in a stylistically accurate way

Mental Skills

- Prep for performance:
- Systematic repetition
- Mental rehearsal
- Rehearsal discipline
- Planning of rehearsal
- Response to feedback
- Capacity to improve
- During performance:
- Movement memory
- Commitment
- Concentration
- Confidence

Safe Practice

- Prep for performance:
- Warming up
- Cooling down
- Nutrition
- Hydration
- During performance:
- Safe execution
- Appropriate dance wear:
- footwear
- hairstyle
- clothing
- absence of jewellery



# GCSE Dance Knowledge Organiser – Choreography

Actions:  
 travel  
 turn  
 elevation  
 gesture  
 stillness  
 use of different  
 body parts  
 floor work  
 transfer of  
 weight

Space:  
 pathways  
 levels  
 directions  
 size of  
 movement  
 patterns  
 spatial design

Dynamics:  
 fast  
 slow  
 sudden  
 sustained  
 acceleration  
 deceleration  
 strong  
 light  
 direct  
 indirect  
 flowing  
 abrupt

Relationships:  
 lead and follow  
 mirroring  
 action and  
 reaction  
 accumulation  
 complement  
 and contrast  
 counterpoint  
 contact  
 formations

Process:  
 researching  
 improvising  
 generating  
 selecting  
 developing  
 structuring  
 refining

Communication  
 intention  
 mood  
 meaning  
 idea  
 theme  
 style

Structure:  
 binary  
 ternary  
 rondo  
 narrative  
 episodic  
 transitions  
 unison  
 canon

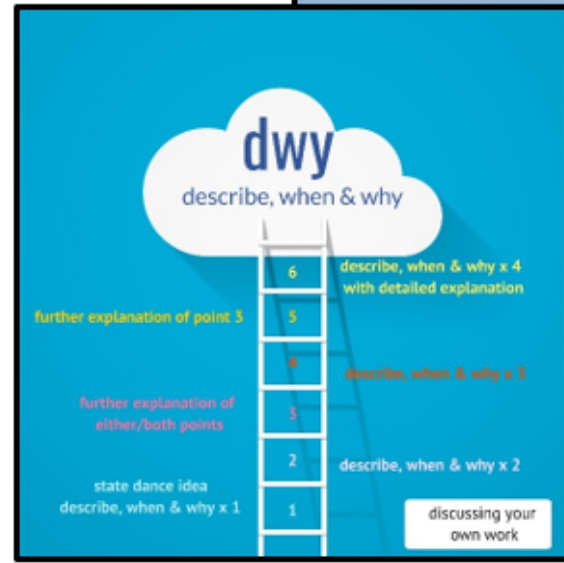
Devices:  
 motif and  
 development  
 repetition  
 contrast  
 highlights  
 climax  
 manipulation of  
 number  
 unison and  
 canon

Aural Setting:

- song
- instrumental
- orchestral
- spoken word
- silence
- natural sound
- found sound
- body percussion.

*Effects on choreographic outcomes:*

- mood and atmosphere
- contrast and variety
- structure
- relationship to theme/idea



# GCSE Dance Knowledge Organiser – Performance

<p><u>Technical skills, including:</u></p> <ul style="list-style-type: none"> <li>action content</li> <li>dynamic content</li> <li>relationship content</li> <li>timing content</li> <li>rhythmic content</li> <li>movement in a stylistically accurate way</li> </ul>	<p><u>Expressive skills, including:</u></p> <ul style="list-style-type: none"> <li>projection</li> <li>focus</li> <li>spatial awareness</li> <li>facial expression</li> <li>phrasing.</li> </ul> <p>For duet/trio performance only:</p> <ul style="list-style-type: none"> <li>musicality</li> <li>sensitivity to other dancers</li> <li>communication of choreographic intent, including mood(s), meaning(s), idea(s), theme(s) and/or style/style fusion(s)</li> </ul>	<p><u>Mental skills and attributes including:</u></p> <p><b>During Performance</b></p> <ul style="list-style-type: none"> <li>movement memory</li> <li>commitment</li> <li>concentration</li> <li>confidence</li> </ul> <p><b>Process</b></p> <ul style="list-style-type: none"> <li>systematic repetition</li> <li>mental rehearsal</li> <li>rehearsal discipline</li> <li>planning of rehearsal</li> <li>response to feedback</li> <li>capacity to improve</li> </ul>	<p><u>Physical skills and attributes:</u></p> <ul style="list-style-type: none"> <li>posture</li> <li>alignment</li> <li>balance</li> <li>coordination</li> <li>control</li> <li>flexibility</li> <li>mobility</li> <li>strength</li> <li>stamina</li> <li>extension</li> <li>isolation</li> </ul>
<p><u>Set Phrases</u></p> <p style="text-align: center;">Breath</p> <p style="text-align: center;">Shift</p>	<p><u>Group Dance</u></p> <p style="text-align: center;">Duet / Trio</p>	<p><u>Safe Execution</u></p> <ul style="list-style-type: none"> <li>Dancers need to ensure they safely execute the actions; physical skills can help with safe execution.</li> <li>Bending the knees (plié) when elevating, landing, lifting or catching another dancer.</li> <li>Bending the knees to lower the centre of gravity to the floor when performing floor work.</li> <li>Using the hands to support the weight of the body when moving into the floor to prevent bottom or knee injuries.</li> <li>Ensuring the arms and legs are correctly aligned so that muscles are not strained at the joints.</li> <li>Ensuring the knees move over the toes when bending to prevent twisting in the knee.</li> <li>Turning out from the hip rather than the knee to prevent knee injury.</li> <li>Rolling through the feet when landing to prevent Achilles injuries.</li> </ul>	
<p><u>Cooling down: Reasons to cool down:</u></p> <ul style="list-style-type: none"> <li>Prepares body for stopping exercise</li> <li>Decreases injury or muscle soreness</li> <li>Lowers heart rate</li> </ul> <p><u>Stages of cool down:</u></p> <ul style="list-style-type: none"> <li>Gentle stretches</li> <li>Breathing exercises</li> </ul>	<p><u>Warm Up: Reasons to warm up:</u></p> <ul style="list-style-type: none"> <li>Prepares body for exercise</li> <li>Increases blood flow which warms muscles</li> <li>Prepares mind for exercise</li> <li>To prevent injury</li> </ul> <p><u>Stages of warm up:</u></p> <ul style="list-style-type: none"> <li>Pulse raising: jogging, jumping, star jumps etc</li> <li>Stretching: moving or static stretches</li> <li>Mobilising: moving of joints, shoulder/head/ankle rolls etc</li> <li>Technique/Conditioning: specific exercises to enhance physical skills</li> </ul>		

CORE		Key verb phrases		Connectives	
<b>Time phrases/Sequencers</b>					
normally	<u>normalement</u>	I have	<u>j'ai</u>	but	<u>mais</u>
often	<u>souvent</u>	I have not	<u>je n'ai pas de</u>	and	<u>et</u>
usually	<u>d'habitude</u>	I am	<u>je suis</u>	because	<u>car/ parce que</u>
from time to time	<u>de temps en temps</u>	I am not	<u>je ne suis pas</u>	also	<u>aussi</u>
sometimes	<u>quelquefois/parfois</u>	I would like	<u>je voudrais</u>	however	<u>cependant</u>
tomorrow	<u>demain</u>	it is	<u>c'est</u>	therefore	<u>donc</u>
next week	<u>la semaine prochaine</u>	it is not	<u>ce n'est pas</u>	as	<u>comme</u>
Summer / Autumn	<u>en été / en automne</u>	there is	<u>il y a</u>	or	<u>ou</u>
Winter / Spring	<u>en hiver / au printemps</u>	there is not	<u>il n'y a pas de</u>	however	<u>pourtant</u>
morning/afternoon/evening	<u>le matin/l'après-midi/le soir</u>	it will be	<u>ce sera</u>	on the other hand	<u>par contre</u>
then	<u>puis</u>	I'm going to....	<u>je vais +infinitive</u>	fortunately	<u>heureusement</u>
always/still	<u>toujours</u>	you must	<u>on doit +infinitive</u>	unfortunately	<u>malheureusement</u>
at the moment	<u>en ce moment</u>	you must not	<u>on ne doit pas +infinitive</u>	in addition	<u>en plus</u>
later	<u>plus tard</u>	you can	<u>on peut +infinitive</u>		
in the future	<u>a l'avenir</u>	you cannot	<u>on ne peut pas +infinitive</u>	<b>Negatives</b>	
yesterday	<u>hier</u>	it was	<u>c'était</u>	not	<u>ne...jamais</u>
last night	<u>hier soir</u>	it wasn't	<u>ce n'était pas</u>	never	<u>ne...pas</u>
last week	<u>la semaine dernière</u>	there was	<u>il y avait</u>	<b>Comparisons</b>	
last year	<u>l'année dernière</u>	there wasn't	<u>il n'y avait pas de</u>		
next	<u>ensuite</u>	it would be	<u>ce serait</u>	more... than	<u>plus ... que</u>
firstly	<u>d'abord</u>	it would not be	<u>ce ne serait pas</u>	less... than	<u>moins ... que</u>
after	<u>après ça</u>	if I was rich	<u>si j'étais riche</u>		
before	<u>avant</u>	in an ideal world	<u>dans un monde idéal</u>		
lastly	<u>enfin / finalement</u>	in my dreams	<u>dans mes rêves</u>		
<b>Quantifiers/ Intensifiers</b>		<b>Opinions</b>		<b>Idioms</b>	
very	<u>très</u>	In my opinion	<u>à mon avis / selon moi</u>	How awful !	<u>Quelle horreur !</u>
too	<u>trop</u>	I think that	<u>je pense que</u>	What luck !	<u>Quelle chance !</u>
quite	<u>assez</u>	I Like	<u>j'aime</u>	What a surprise !	<u>Quelle surprise !</u>
a bit	<u>un peu</u>	I love	<u>j'adore</u>	What an idiot!	<u>Quel imbécile !</u>
really	<u>vraiment</u>	I don't like	<u>je n'aime pas</u>	It's brilliant !	<u>C'est le pied !</u>
a lot	<u>beaucoup</u>	I hate	<u>je déteste</u>	It's not my thing !	<u>Ce n'est pas mon truc !</u>
		I prefer	<u>je préfère</u>	It's a waste of time!	<u>C'est une perte de temps !</u>
		My favourite ... is	<u>ma/mon.... préféré(e) est</u>	It's a waste of money!	<u>C'est une perte d'argent !</u>
		I find that	<u>je trouve que</u>		

CHALLENGE			
<b>Time phrases/ Sequencers</b>		<b>Key verb phrases</b>	
today	<u>aujourd'hui</u>	you can see	<u>on peut voir</u>
each/every	<u>chaque</u>	if it is	<u>si c'est</u>
currently	<u>actuellement</u>	there would be	<u>il y aurait</u>
the next day	<u>le lendemain</u>	there would not be	<u>il n'y aurait pas de</u>
in my dreams	<u>dans mes rêves</u>	you could	<u>on pourrait</u> +infinitive
in an ideal world	<u>dans un monde idéal</u>	you couldn't	<u>on ne pourrait pas</u>
when I was little	<u>quand j'étais petit ( e )</u>	you should	<u>on devrait</u> +infinitive
when I'm older	<u>quand je serai plus âgé ( e )</u>	you shouldn't	<u>on ne devrait pas</u>
for 5 years	<u>depuis 5 ans</u>	you must	<u>il faut</u> +infinitive
since I was 5 years old	<u>depuis l'âge de 5 ans</u>	you must not	<u>il ne faut pas</u>
<b>Quantifiers/ Intensifiers</b>		<b>Negatives</b>	
so	<u>si</u>	no...more/longer	<u>ne... plus</u>
rather	<u>plutôt</u>	nothing	<u>ne... rien</u>
extremely	<u>extrêmement</u>	no one/nobody	<u>ne... personne</u>
frankly	<u>franchement</u>	neither ...nor	<u>ne... ni... ni</u>
hugely	<u>énormément</u>		
incredibly	<u>incroyablement</u>		
<b>Connectives</b>		<b>Comparisons/ Superlatives</b>	
nevertheless	<u>néanmoins</u>	best	<u>meilleur ( e )</u>
whereas	<u>tandis que</u>	worst	<u>pire</u>
even if	<u>même si</u>	the best thing is	<u>la meilleure chose est</u>
furthermore	<u>de plus</u>	the most important	<u>la chose la plus</u>
since	<u>puisque</u>	thing is	<u>importante est</u>
not at all	<u>pas du tout</u>	what I like the most is	<u>ce que j'aime le plus est</u>
		<b>Opinions</b>	
		for me	<u>d'après moi</u>
		I believe that	<u>je crois que</u>
		according to...	<u>selon...</u>
		I really hate	<u>j'ai horreur de</u>
		I really love	<u>j'apprécie</u>
		I can't stand	<u>je ne supporte pas</u>
		my friends say that	<u>mes copains disent que</u>
		my parents say that	<u>mes parents disent que</u>
		my teachers say that	<u>mes profs disent que</u>
		my mum tells me that	<u>ma mère me dit que</u>
		my dad tells me that	<u>mon père me dit que</u>
		I would say	<u>je dirais que</u>
		I like /love it / them	<u>j'aime/j'adore ça</u>
		I am for	<u>je suis pour</u>
		I am against	<u>je suis contre</u>
		I agree with	<u>je suis d'accord avec</u>
		I disagree with	<u>je ne suis pas accord avec</u>
		what I like is	<u>ce que j'aime c'est</u>
		it seems that	<u>il semble que</u>
		as far as... is concerned	<u>en ce qui concerne...</u>
		<b>Idioms</b>	
		Although it is...	<u>Bien que ce soit...</u>
		That's life !	<u>C'est la vie !</u>
		What a shame !	<u>Quel dommage !</u>
		What a disaster !	<u>Quelle catastrophe !</u>
		What a pain !	<u>Quel ennui !</u>
		It was so boring !	<u>C'était la barbe !</u>
		I was over the moon!	<u>J'étais aux anges !</u>
		I was bored to death!	<u>Je m'ennuyais à mourir !</u>
		I've had enough!	<u>J'ai le cafard !</u>
		I was so fed up!	<u>J'en avais marre !</u>

## Lionheart Modern Languages Year 7-9 High Frequency Words – SPANISH CHALLENGE

CORE		Key verb phrases		Connectives	
<b>Time phrases / Sequencers</b>					
normally	<b>normalmente</b>	I have	<b>tengo</b>	but	<b>pero</b>
often	<b>a menudo</b>	I have not	<b>no tengo</b>	and	<b>y</b>
usually	<b>generalmente</b>	I am	<b>soy / estoy</b>	because	<b>porque / ya que</b>
from time to time	<b>de vez en cuando</b>	I am not	<b>no soy / estoy</b>	also	<b>también</b>
sometimes	<b>a veces</b>	I would like	<b>me gustaría</b>	however	<b>sin embargo</b>
tomorrow	<b>mañana</b>	it is	<b>es / está</b>	therefore	<b>por lo tanto / por eso</b>
next week	<b>la semana próxima</b>	it is not	<b>no es / está</b>	as	<b>como</b>
summer / autumn	<b>en verano / otoño</b>	there is	<b>hay</b>	or	<b>o</b>
winter / spring	<b>en invierno / primavera</b>	there is not	<b>no hay</b>	however / although	<b>aunque</b>
morning/afternoon/evening	<b>por la mañana/ tarde/ noche</b>	it will be	<b>será</b>	on the other hand	<b>por otro lado</b>
then	<b>luego / después</b>	I'm going to	<b>voy a + infinitive</b>	fortunately	<b>por suerte</b>
always/still	<b>siempre / aún</b>	you must	<b>se debe + infinitive</b>	unfortunately	<b>por desgracia</b>
at the moment	<b>en este momento / ahora</b>	you must not	<b>no se debe + infinitive</b>	in addition	<b>además</b>
later	<b>más tarde / después</b>	you can	<b>se puede + infinitive</b>		
in the future	<b>en el futuro</b>	you cannot	<b>no se puede + infinitive</b>	<b>Negatives</b>	
yesterday	<b>ayer</b>	it was	<b>fue</b>	not	<b>no...</b>
last night	<b>anoche</b>	it wasn't	<b>no fue</b>	never	<b>no... nunca</b>
last week	<b>la semana pasada</b>	there was	<b>había</b>	<b>Comparisons</b>	
last year	<b>el año pasado</b>	there wasn't	<b>no había</b>	more... than	<b>más... que</b>
two years ago	<b>hace dos años</b>	it would be	<b>sería</b>	less... than	<b>menos... que</b>
next	<b>luego</b>	it would not be	<b>no sería</b>		
firstly	<b>primero</b>	if i was rich	<b>si fuera rico/a</b>		
after	<b>después (de)</b>	in an ideal world	<b>en un mundo ideal</b>		
before	<b>antes (de)</b>	in my dreams	<b>en mis sueños</b>		
lastly	<b>finalmente</b>				
<b>Quantifiers / Intensifiers</b>		<b>Opinions</b>		<b>Idioms</b>	
Very	<b>muy</b>	In my opinion	<b>en mi opinión</b>	How great !	<b>¡ Qué bien !</b>
Too	<b>demasiado</b>	I think that	<b>pienso que</b>	How bad !	<b>¡ Qué mal !</b>
Quite	<b>bastante</b>	I like	<b>me gusta(n)</b>	How funny !	<b>¡ Qué divertido !</b>
A bit	<b>un poco</b>	I love	<b>me encanta(n)</b>	How cool !	<b>¡ Qué guay !</b>
so	<b>tan</b>	I don't like	<b>no me gusta(n)</b>	How boring / annoying !	<b>¡ Qué aburrido! ¡Qué rollo !</b>
Really	<b>adjective ending -ísimo/a(s)</b>	I hate	<b>odio</b>	How dreadful !	<b>¡ Qué horror !</b>
A lot	<b>mucho</b>	I prefer	<b>prefiero</b>	It's crazy !	<b>¡ Es una locura !</b>
		My favourite is	<b>mi... favorito/a es...</b>	It's a waste of time!	<b>¡ Es una pérdida de tiempo !</b>
		I find it	<b>me parece</b>	It's a waste of money!	<b>¡ Es una pérdida de dinero !</b>



## Lionheart Modern Languages Year 7-9 High Frequency Words – SPANISH CHALLENGE

CHALLENGE		Key verb phrases		Opinions	
<b>Time phrases / Sequencers</b>					
today each/every currently the next day in my dreams in an ideal world when i was little when i'm older for 5 years (now) since i was 5 years old	<b>hoy</b> <b>cada</b> <b>actualmente</b> <b>al día siguiente</b> <b>en mis sueños</b> <b>en un mundo ideal</b> <b>cuando era pequeño/a</b> <b>cuando sea mayor</b> <b>desde hace 5 años</b> <b>desde que tenía 5 años</b>	you can see if it is there would be there would not be you could you couldn't you should you shouldn't you must you must not	<b>se puede(n) ver</b> <b>si es</b> <b>habría</b> <b>no habría</b> <b>podría + infinitive</b> <b>no podría + infinitive</b> <b>debería + infinitive</b> <b>no debería + infinitive</b> <b>hay que + infinitive</b> <b>no hay que + infinitive</b>	for me as I see it I believe that according to... I really hate I really love I can't stand my friends say that my parents say that my teachers say that my mum/dad tell me that i would say I like/love it / them I am for I am against I agree with I disagree with what I like... it seems that as for me	<b>para mí</b> <b>a mi modo de ver / a mi juicio...</b> <b>creo que</b> <b>según / para...</b> <b>detesto</b> <b>me chifla/ me mola</b> <b>no aguanto / no soporto</b> <b>mis amigos dicen que</b> <b>mis padres dicen que</b> <b>mis profesores dicen que</b> <b>mi madre /mi padre me dice que</b> <b>diría que</b> <b>me gusta(n) / me encanta(n)</b> <b>estoy a favor de</b> <b>estoy en contra de</b> <b>estoy de acuerdo con</b> <b>no estoy de acuerdo con</b> <b>lo que me gusta..</b> <b>me parece que</b> <b>por mi parte / en cuanto a mí</b>
<b>Quantifiers / Intensifiers</b>		<b>Negatives</b>			
so rather extremely frankly entirely/ totally incredibly	<b>tan</b> <b>bastante</b> <b>extremadamente</b> <b>francamente</b> <b>totalmente</b> <b>increíblemente</b>	no...more/longer nothing no one/nobody neither... nor	<b>ya no...</b> <b>no... nada</b> <b>no... nadie</b> <b>no... ni...</b>		
<b>Connectives</b>		<b>Comparisons / Superlatives</b>		<b>Idioms</b>	
nevertheless whereas even if additionally since not at all	<b>aun así</b> <b>mientras que</b> <b>aunque</b> <b>asimismo</b> <b>dado que / ya que</b> <b>en absoluto</b>	best worst the best thing is the most important is what I like the most is	<b>mejor</b> <b>peor</b> <b>lo mejor es</b> <b>lo más importante es</b> <b>lo que más me gusta es</b>	No more excuses ! I am fed up ! What a shame ! What a disaster ! It sounds funny /curious ! A dream come true ! It is the most exciting thing I have ever seen! It has been the most important / unforgettable experience of my life! I have enjoyed it a lot	<b>i Basta de excusas !</b> <b>i Estoy harto/a !</b> <b>i Qué lástima !</b> <b>i Qué desastre !</b> <b>i Suena muy gracioso / curioso !</b> <b>i Es un sueño hecho realidad !</b> <b>i Es lo más emocionante que he visto jamás !</b> <b>i Ha sido la experiencia más importante / inolvidable de mi vida !</b> <b>i Lo he disfrutado muchísimo !</b>



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